## MEASURING READINESS IN THE OPERATIONAL RESERVE

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE
General Studies

by

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### 14. ABSTRACT

This thesis explored how the operational United States Army Reserve (USAR) measures readiness with respect to Duty Military Occupation Specialty Qualification (DMOSQ). The USAR's current manning policies strive to maintain DMOSQ fill rates at 85 percent, or higher in units to prepare them for operational use. DMOSQ percentages for USAR units have historically been lower than 85 percent resulting in the need to cross-fill Soldiers into units to meet personnel requirements for deployment. This thesis explored the feasibility of requiring USAR units to maintain DMOSQ rates that exceed Army Force Generation (ARFORGEN) requirements and whether it improves readiness and reduces the need for cross-filling Soldiers. A study of USAR readiness literature and the history of USAR readiness were made to understand the evolution of the systems, policies, and procedures used today to manage USAR readiness. This study determined that the DMOSQ data is too corruptible to accurately determine the feasibility of maintaining DMOSQ rates higher than ARFORGEN requirements. The issues affecting the accuracy of DMOSQ reporting discovered in this thesis relate to historical business practices from the Strategic Reserve. Human error, USAR policy, and multiple reporting systems are some specific things that affect the accuracy of USAR DMOSQ data. Additionally, this thesis recommended ways to improve the accuracy and timeliness of DMOSQ reporting, accounting for non-DMOSQ Soldiers; raise DMOSQ percentages; and improve cohesiveness in units.

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#### **ABSTRACT**

MEASURING READINESS IN THE OPERATIONAL RESERVE, by MAJ Michael J. Stribrny, 121 pages.

This thesis explored how the operational United States Army Reserve (USAR) measures readiness with respect to Duty Military Occupation Specialty Qualification (DMOSQ). The USAR's current manning policies strive to maintain DMOSQ fill rates at 85 percent, or higher in units to prepare them for operational use. DMOSQ percentages for USAR units have historically been lower than 85 percent resulting in the need to cross-fill Soldiers into units to meet personnel requirements for deployment. This thesis explored the feasibility of requiring USAR units to maintain DMOSQ rates that exceed Army Force Generation (ARFORGEN) requirements and whether it improves readiness and reduces the need for cross-filling Soldiers. A study of USAR readiness literature and the history of USAR readiness were made to understand the evolution of the systems, policies, and procedures used today to manage USAR readiness. This study determined that the DMOSQ data is too corruptible to accurately determine the feasibility of maintaining DMOSQ rates higher than ARFORGEN requirements. The issues affecting the accuracy of DMOSQ reporting discovered in this thesis relate to historical business practices from the Strategic Reserve. Human error, USAR policy, and multiple reporting systems are some specific things that affect the accuracy of USAR DMOSQ data. Additionally, this thesis recommended ways to improve the accuracy and timeliness of DMOSQ reporting, accounting for non-DMOSQ Soldiers; raise DMOSQ percentages; and improve cohesiveness in units.

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### **ACRONYMS**

AC Active Component

AD Active Duty

AGR Active Guard Reserve

AGRMIS Army Guard Reserve Management Information System

APFT Army Physical Fitness Testing

AR Army Regulation

AREF Army Reserve Expeditionary Force

ARFORGEN Army Force Generation

ARR Army Readiness Regions

ASO ARFORGEN Synchronization Order

ATRRS Army Training Requirements and Resources System

CAC Common Access Card

CEF Contingency Expeditionary Force

CFP Contingency Force Pool

CRF Crisis Response Forces

CUSR Commander Unit Status Reporting

DEF Deployment Expeditionary Force

DMOSQ Duty Military Occupational Specialty Qualification

DoD Department of Defense

DRC Direct Reporting Command

DRRS-A Defense Readiness Reporting System-Army

DTMS Digital Training Management System

FSP Force Support Package

FTS Full Time Staff

FY Fiscal Year

GCC Geographical Combatant Command

GWOT Global War on Terrorism

HRC Human Resource Command

IDT Inactive Duty Training

IMA Individual Moblization Augmentee

IRR Individual Ready Reserve

ITRS Individual Training Readiness System

LAD Latest Arrival Date

MOS Military Occupational Specialty

MOSQ Military Occupational Specialty Qualification

MTOE Modified Table of Organization and Equipment

NetUSR Net-Centric Unit Status Reporting

NG National Guard

NGB National Guard Bureau

OCAR Office Chief Army Reserve

ORC Officer Reserve Corps

RC Reserve Component

RLAS Regional Level Application Software

SIPR Secure Internet Protocol Router

SRF Selected Reserve Force

T/R Train/Ready

TAPDB-R Total Army Personnel Data Base-Reserve

TDA Table of Distribution and Allowances

viii

TOE Table of Organization and Equipment

TPU Troop Program Unit

TTHS Trainee, Transient, Holdee, and Student

UA Unit Administrator

UMR Unit Manning Roster

USAR United States Army Reserve

USARC United States Army Reserve Command

# **ILLUSTRATIONS**

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#### CHAPTER 1

### INTRODUCTION AND OVERVIEW

A key factor to understanding RC training challenges is comprehending the distinct differences between Reserve Component (RC) and Active Component (AC) training. Unlike AC units, which have Military Occupational Specialty (MOS)-qualified Soldiers assigned to them by Human Resource Command (HRC), RC units usually recruit Soldiers from the local area. Whether initial entry or prior service, these Soldiers are assigned to the unit and then must attend MOS qualification training.<sup>1</sup>

— Department of Command, Leadership and Management, 2013–2014 How the Army Runs: A Senior Leader Reference Handbook

I stand ready to deploy, engage, and destroy the enemies of the United States of America in close combat.<sup>2</sup>

— United States Army, Soldiers Creed.

Four brave men who do not know each other will not dare to attack a lion. Four less brave, but knowing each other well, sure of their reliability and consequently of mutual aid will attack resolutely. There is the science of the organization of armies in a nutshell.<sup>3</sup>

— Ardant Du Picq

Looking ahead in 2002, United States Army Reserve (USAR) mandated as part of the adoption of the Operational Force Model, that all units were to maintain individual Soldier qualification, also known as Duty Military Occupational Specialty Qualification

<sup>&</sup>lt;sup>1</sup>Department of Command, Leadership and Management, 2013-2014 How the Army Runs: A Senior Leader Reference Handbook (Carlisle Barracks, PA: U.S Army War College, 2013), 7-15.

<sup>&</sup>lt;sup>2</sup>United States Army, *Soldiers Creed*, Army Values, http://www.army.mil/values/soldiers.html (accessed October 27, 2013).

<sup>&</sup>lt;sup>3</sup>As quoted in Richard B. Crossland and James T Currie, *Twice the Citizen: A History of the USAR 1908-1983* (Washington, DC: Chief Army Reserve, 1983), 208.

(DMOSQ), at 85 percent or higher. The adoption of the Operational Force Model by the USAR meant that Army Reserve units would be integrated into Active Army Operational activities and no longer exist as merely a source for manpower needs in the event of full scale war. Now that the Army Total Force is faced with a troop size reduction, cuts in budget for incentives, benefits, and training, is it still realistic to expect all USAR units to achieve the 85 Percent DMOSQ goal during all phases of Army Force Generation (ARFORGEN) cycle? This thesis set out to answer the feasibility of requiring units to continue to maintain 85 percent DMOSQ along with ARFORGEN.

In order to be able to determine the feasibility of continuing to maintain all USAR units at 85 percent DMOSQ or higher it is important to understand how DMOSQ affects unit readiness. Part of the measurement of personnel (also known as P-Level) readiness in ARFORGEN is the percentage of Military Occupational Specialty (MOS) qualified Soldiers filling positions within the unit. A Shortage of MOS qualified Soldiers is one of the leading factors that contribute to readiness shortfalls faced by USAR units. USAR Soldiers, assigned to a Troop Program Unit (TPU), are not considered deployable unless they are MOS qualified for their assigned duty position. Additionally, non-DMOSQ Soldiers assigned to a unit reduce the readiness percentages expressed within the manning and readiness systems. Manning was cited as one of the most difficult challenges for the USAR in FY 12.4 When a unit has a shortage in DMOSQ, Soldiers' collective training will be negatively affected. Unit collective training consists of training that builds cohesive teams and units to ensure they can accomplish their critical wartime

<sup>&</sup>lt;sup>4</sup>Jack C. Stultz, *The United States Army Reserve 2012 Posture Statement* (Washington, DC: Office of the Secretary of the Army, 2012), 22-23.

missions.<sup>5</sup> The tasks that are trained during collective training assume a near-100-percent DMOSQ fill for the unit. The lower the overall DMOSQ fill rate for a unit, the less precise the objective training evaluation results will be. The multitude of tasks that are required to be accomplished will eventually overwhelm a unit that has a shortage of personnel. Collective training is resource intensive and is more effective the closer the unit is to 100 percent DMOSQ fill. As Army units progress though the ARFORGEN model, they are required to meet readiness pool gates to progress to the next phase. The failure of a unit to meet the readiness standards may result in decisions that result in less training resources for the unit. Additionally, ARFORGEN provides unit and Soldier predictability and assists in force generation for the USAR. The linkage between DMOSQ, manning, and ARFORGEN make investigating the additional DMOSQ requirements all the more important.

To begin the investigation into the feasibility of maintaining the additional DMOSQ readiness requirement in USAR requires understanding of scholarly works related to solving DMOSQ issues; reviewing the history of DMOSQ in the USAR; and explaining the systems, policies, and procedures used to manage DMOSQ in USAR units. Once these objectives are accomplished a recommendation on the feasibility of maintaining the 85 percent DMOSQ across all USAR units will be made in the conclusion of this thesis.

While evaluating the feasibility of maintaining 85 percent DMOSQ this thesis will not delve into the equally complex issues that can make a Soldier non-deployable. It

<sup>&</sup>lt;sup>5</sup>Headquarters, Department of the Army, Army Regulation 525-29, *Army Force Generation* (Washington, DC: Headquarters, Department of the Army, 2011), 3.

will not address annual weapons qualification, failure to meet physical fitness standards, testing positive on a unit drug reduction test, failure to meet weight control standards, failure to accomplish annual medical and dental requirements, failure to conduct individual and collective training requirements, pregnancy, or any other disqualifier for deployment except DMOSQ. Availability of DMOSQ institutional training, Soldier absentees as it relates to missed DMOSQ training, and employer conflicts will be discussed only when applicable or supportive to the issue. In addition finding solutions for shortages in seats for DMOSQ schooling, if they exist, is outside the scope of this thesis.

During the investigation this thesis will concentrate primarily on USAR (Title 10) and less on NG forces (Title 32). Although the issues are similar, the complexity of contrasting the business practices of 54 different NG states and territories and the Army National Guard Directorate is outside the scope of this thesis.

To begin the analysis of the feasibility of maintaining DMOSQ at 85 percent or higher in all units of the USAR a review of previous scholarly works on the subject of DMOSQ is required.

### **CHAPTER 2**

#### LITERATURE REVIEW

To begin the analysis of the feasibility of maintaining DMOSQ at 85 percent or higher in USAR units a review of previous scholarly works is required. Highlighted in the review of the limited literature are subjects from the documents that specifically address USAR and readiness from World War II through today. The review of the literature provides a perspective into the past thoughts for improving readiness in the USAR.

Richard B. Crossland and James T. Currie's work, *Twice the Citizen: A History of the USAR 1908–1983*, is often cited in general studies on the subject of USAR readiness because it was until recently the only book-length history study of the USAR.<sup>6</sup> Since *Twice the Citizen* was published, there have not been many book-length documents published dealing with USAR DMOSQ and the effects on readiness. Instead, there has been a small amount of military, civilian educational institute, and industrial think tank publications released covering the subject of USAR DMOSQ readiness. Typically the subjects, proposed solutions, and focuses of the publications dealing with DMOSQ and readiness from 1970 to today reflect popular themes historically important to the Total Force. Recently, the USAR has published an updated continuation to *Twice the Citizen* called *The Indispensable Force: The Post-Cold War Operational Army Reserve, 1990-*

<sup>&</sup>lt;sup>6</sup>Crossland, and Currie, *Twice the Citizen*.

2010.<sup>7</sup> Currently *The Indispensable Force* is available on the Office of Army Reserve History website in Adobe portable document format (.pdf) and is not cited in any currently published literature.

Since the restructuring of the USAR following the end of the draft in the early 1970s, there have been reoccurring and differing themes studied as to the reason that readiness has been historically low. During this period, low readiness was attributed to the inability of the USAR to properly report readiness data. Readiness in the USAR was viewed as a basic misunderstanding of the differences between reporting requirements for AC and USAR units. United States Army War College studies cited the need for USAR units to be added into contingency plans to safe guard the against USAR end strength reductions. While the Total Force down sized at the end of United States involvement in Vietnam, the ability of the USAR to provide ready units quickly and cheaply became more important. As the draft ended in 1973, continued affiliation between USAR and AC units was seen as a solution to solving collective training and readiness shortfalls. In early 1970, AC standards of unit readiness, TOE, and Mission Essential Task List were adopted by the USAR. This resulted in policies that began the process to align the USAR with AC units to help simplify training and readiness. Affiliation programs like

<sup>&</sup>lt;sup>7</sup>Kathryn R. Coker, *The Indispensable Force, The Post-Cold War Operational Army Reserve, 1990-2010,* Edited by Lee S. Harford, Jr., Ressie Harris-Delgado, Jason Wetzel, Christopher Ruff, Jennifer Friend, and Deborah Foster-King (Fort Bragg, NC: Office of Army Reserve History, 2013).

<sup>&</sup>lt;sup>8</sup>Edmund W. Sullivan, "Reserve Component Readiness Evaluation" (Essay, Army War College, Carlisle Barracks, PA, 1972), ii.

<sup>&</sup>lt;sup>9</sup>Tom Talmage Main Jr, "The Citizen-Soldier in the 1970s" (Essay, Army War College, Carlisle Barracks, PA, 1970).

STEADFAST were hailed as a helpful in improving unit readiness by the General Research Corporation. <sup>10</sup> In hindsight, mid-1970s Army War College studies acknowledged that programs like STEDFAST had not actually helped with USAR unit readiness and shortfalls. <sup>11</sup>

In the late 1970s, the General Research Corporation looked to the practices in foreign countries regarding their reserve forces for possible solutions to improve readiness. This research was partially in reaction to the successful use of Israeli reserve forces during the 1973 Yom Kippur War and USAR failures to efficiently mobilize during the Berlin Crisis and Vietnam mobilizations. The short time between mobilization and use of the Israeli Reserve was an example of how the USAR could possibly learn best practices in managing readiness. <sup>12</sup> Soon after the United States-led invasion of Grenada in 1983, a study from the Command and General Staff College cited the lack of training time as being the major factor in the low readiness of USAR units. <sup>13</sup> In 1986, the Army Research Institute for the Behavioral and Social Sciences concluded individual

<sup>&</sup>lt;sup>10</sup>Robert A. Gessert, et al., *Evaluation of Reserve Component Improvement Concepts Volume I. Executive Summary* (McLean, VA: General Research Corp, 1975).

<sup>&</sup>lt;sup>11</sup>Lyle C. Doerr, "Reserve Component Readiness: The FORSCOM Role" (Essay, Army War College, Carlisle Barracks, PA, 1975), 4.

<sup>&</sup>lt;sup>12</sup>Irving Heymont, *Improvement of NATO Reserves Analysis of the Army Reserve Systems of Israel, Canada, United Kingdom, Federal Republic of Germany* (McLean, VA: General Research Corp, 1973), 1.

<sup>&</sup>lt;sup>13</sup>D. B. Skipper, "The Reserve Component Dilemma: Mission vs. Time" (Master's thesis, Army Command and General Staff College, Fort Leavenworth, KS, 1984).

readiness, specifically low rates of DMOSQ Soldiers in units, as the overwhelming reason for low unit readiness.<sup>14</sup>

After Desert Storm in 1991 the focus of several Rand Arroyo Center studies recommended affiliation with AC units as a solution to improve USAR unit readiness. The Rand Arroyo Center published *Post-Mobilization Training of Army Reserve Component Combat Units* that assumed DMOSQ was at 90 percent or higher in evaluating readiness for collective training. <sup>15</sup> Explained further in the introduction to *Post-Mobilization of Army Reserve Component Combat Units* are two paragraphs stating a clear connection between and understanding of low DMOSQ and high turbulence rates in the USAR. Thomas F. Lippiatt, J. M. Polich, and Ronald E. Sortor concluded the main reasons manning in the USAR was problematic were the inability of units to recruit to their authorized strength, poor management and assignment practices, and the failure to get personnel to the required schools. <sup>16</sup> At the close of Desert Storm, the Army was faced with budget and force reductions. An Industrial College of the Armed Forces publication suggested improving units' readiness by being more selective when culling the force and

<sup>&</sup>lt;sup>14</sup>James A. Bynum and M. A. Fischl, "'Recommendations for People Research and Development' Actions to Improve Army Reserve Component Readiness" (Research Report, Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA, 1986).

<sup>&</sup>lt;sup>15</sup>The assumption was done to negate the effects a low DMOSQ has on unit collective training for the chapter in the study. The connection between low DMOSQ and the direct effect on unit training can be seen by the need to make this assumption. Individual training is covered in later chapters of *Post-Mobilization Training of Army Reserve Component Combat Units*.

<sup>&</sup>lt;sup>16</sup>Thomas F. Lippiatt, J. M. Polich, and Ronald E. Sortor, *Post-Mobilization Training of Army Reserve Comonent Combat Units* (Santa Monica, CA: RAND Corporation, 1992), xvi.

placing more qualified individuals into USAR units.<sup>17</sup> In 1993, the inability of planners to define the threat, while budgets were being cut, became a dominant theme for USAR readiness. The USAR's ability to conduct missions without a clearly defined threat was called into question by a student at the Army War College.<sup>18</sup>

In 1994 the Rand Corporation began investigating DMOSQ as it related to unit readiness. A follow-up study from the Institute for Defense suggested that distance learning may be a solution to help improve low unit DMOSQ rates. <sup>19</sup> After the United States involvement in Bosnia in 1995, more Rand Corporation studies highlighted low DMOSQ rates and named them as the main reason for low readiness of USAR units. Similarly themed studies at this time, out of the United States Army War College, focused on unit training time, full-time support staff, and retention as the main reasons for low readiness. Low DMOSQ unit assignment and the need to cross-level Soldiers to fill shortages were seen as normal, and recommendations to streamline the process of cross-leveling of Soldiers and equipment were proposed. <sup>20</sup> One of the main problems identified affecting DMOSQ rates was high turbulence from low morale in USAR units. Suggestions in "America's Total Force: Can Army Reserve Components Adequately Support the National Military Strategy of the 1990s?" for improving DMOSQ readiness

<sup>&</sup>lt;sup>17</sup>Robert Shea, "Total Force: Improving Reserve Component Readiness" (Research Report, Industrial College of the Armed Forces, Washington, DC, 1992), 29.

<sup>&</sup>lt;sup>18</sup>Thomas M. Stenger, "Credibility of the Army Reserve in the New World Disorder" (Study Report, Army War College, Carlisle Barracks, PA, 1993), ii.

<sup>&</sup>lt;sup>19</sup>John Metzko, *Individual Training and Readiness in Support Forces of the Army Reserve Components* (Alexandria VA: Institute for Defense Analysis, 1995), VI-2.

<sup>&</sup>lt;sup>20</sup>Stenger, "Credibility of the Army Reserve in the New World Disorder," ii.

included increasing retention by adopting "the tan beret of the now defunct Alaska Infantry Brigade" for USAR units.<sup>21</sup>

In 1997, the Army proposed the Force XXI concept, and United States Army War College studies made recommendations that would help ensure the USAR remained relevant in the new force structure. <sup>22</sup> Command and General Staff College papers and studies recommended more objective unit readiness reporting, more time to allow cross-leveled Solders to integrate prior to mobilization, and moving non-DMOSQ Soldiers to the new Training TTHS Account to improve RC unit readiness. How data was reported and managed was seen as the main problem. <sup>23</sup> In the "2007 Posture Statement, Army Reserve: An Operational Force," LTG Jack C. Stultz Jr. saw the adoption of the Operational Force model, volunteerism, and retention as the solutions to the need to cross-level Soldiers before deployment and to fixing readiness issues. <sup>24</sup>

Army War College studies in 2007 focused on the requirements of readiness contained in the ARFORGEN model. Reduction in personnel requirements was seen as a possible fix to the issue of cross-leveling. In *Reserve Component Readiness Assessment Methodologies: Is There a Better Way?* James R. Norris recommended that lowering

<sup>&</sup>lt;sup>21</sup>James R. Trimble, "America's Total Force: Can Army Reserve Components Adequately Support the National Military Strategy of the 1990s?" (Strategy Research Project, Army War College, Carlisle Barracks, PA, 1996), 44.

<sup>&</sup>lt;sup>22</sup>Glenn C. Breitling, "The Army Reserve: Relevant in Force XXI" (Research Report, Army War College, Carlisle Barracks, PA, 1997), 27.

<sup>&</sup>lt;sup>23</sup>Gary B. James, "Reserve Component Readiness Assessment Methodologies: Is There a Better Way?" (Monograph, School of Advanced Military Studies, Fort Leavenworth, KS, 2004), 3.

<sup>&</sup>lt;sup>24</sup>Jack C. Stultz, *The United States Army Reserve 2007 Posture Statement* (Washington, DC: Office of the Secretary of the Army, 2007), 27.

expectations for Reserve Components could fix the perception that readiness was poor. <sup>25</sup> In 2010 the USAR studied ways to improve full-time support in Reserve units as a way to improve readiness. The shift, similar to thought during the late 1970s, was that increasing management was likely the key to solving the low DMOSQ rates of units. <sup>26</sup> Low rates of medical and dental readiness were also cited to be the root cause to low readiness rates in 2010. <sup>27</sup>

In 2011 the war in Iraq officially ended. Army War College scholars looked again to the past for models on what may be done to fix the readiness of the USAR in an unpredictable future. <sup>28</sup> In 2013, studies questioned the Operational Reserve model, <sup>29</sup> the economics of the USAR, <sup>30</sup> and how to preserve USAR force readiness during the AC

<sup>&</sup>lt;sup>25</sup>James R. Norris, "The Mobilization of Individual Replacements by the Army Reserve" (Research Project, Army War College, Carlisle Barracks, PA, 2009), 7.

<sup>&</sup>lt;sup>26</sup>Kenneth M. Hammond, "US Army Reserve (USAR) Active Guard (AGR) Force: Shaping Implications" (Research Project, Army War College, Carlisle Barracks, PA, 2010), iv.

<sup>&</sup>lt;sup>27</sup>John Eddy, "Towards an Operational Force: Health Readiness in the Army Reserve" (Strategy Research Project, Army War College, Carlisle Barracks, PA, 2010), 13.

<sup>&</sup>lt;sup>28</sup>Christopher D. Reed, "The Old Army 1898-1941: A Blueprint for the Future?" (Strategy Research Project, Army War College, Carlisle Barracks, PA, 2012), 9.

<sup>&</sup>lt;sup>29</sup>Ronald W. Burkett, II, "Beyond an Operational Reserve" (Master's thesis, National Defense University, Joint Warfighting School, Norfolk, VA, 2013), 3.

<sup>&</sup>lt;sup>30</sup>John G. Casey, "The Army Reserve: Optimally Seeking Relevance and Readiness in a Fiscally Constrained Environment" (Monograph, School of Advanced Military Studies, Fort Leavenworth, KS, 2013), 1.

draw down through renewed emphasis on unit association with AC.<sup>31</sup> All recent studies stress the importance of maintaining readiness in a fiscally constrained environment.

The conclusion of the review of the available literature is that there has been very little study specifically on the topic of maintaining the DMOSQ at 85 percent in the USAR. The transformation of the USAR to an operational force and the pending reduction in Total Forces, more reliance on RC forces, and the importance of readiness to achieve that goal make the topic of DMOSQ readiness both timely and relevant. The literature has not produced an analysis or discussion about maintaining ARFORGEN and 85 percent DMOSQ rates. The literature has produced ideas about improving DMOSQ rates that can be reassessed for implementation in the chapter on recommendations. After reviewing and gaining an understanding of the available scholarly works related to solving DMOSQ readiness issues the next step is to review the history of DMOSQ in the USAR to gain an understanding of the background behind the systems, policies, and procedures of the USAR today.

<sup>&</sup>lt;sup>31</sup>James W. Kellogg, "Leveraging the Reserve Component: Associating Active and Reserve Aviation Units" (Master's thesis, National Defense University, Joint Advanced Warfighting School, 2013), 14.

#### **CHAPTER 3**

### HISTORICAL BACKGROUND

We owe it to our country," General George C. Marshall wrote, "and to the comrades who have made the great sacrifice, to insure that never again will Americans be drawn into a war unprepared. 32

"Our Reserve at the present," stated Stevens, "is inadequate to meet our needs. Its inadequacy is due primarily . . . to the failure to procure the participation of enlisted personnel in adequate numbers in organized units. All other problems associated with the Reserve, are subordinate thereto. Therefore the keystone to a truly Ready Reserve is the procurement of the basically trained personnel who can be integrated, further trained, and retained for a reasonable period of time." <sup>33</sup>

Few of the Reserve officers originally assigned to these units were available for duty with them. Consequently, the units as activated bore small resemblance to those of peacetime.<sup>34</sup>

The next step in the investigation of DMOSQ in the USAR is to review the history of the USAR that is related to readiness. The history of readiness in the USAR is relevant to any current discussion of DMOSQ and readiness. The review of the history provides a perspective into the origin of the systems, policies, and procedures of DMOSQ readiness management in the USAR today.

The history of the USAR spans from 1908 though the current Global War on Terrorism (GWOT). Historical phases specifically relevant to USAR readiness in this thesis are the historical time frames from World War II through the end of Selective

<sup>&</sup>lt;sup>32</sup>Crossland and Currie, *Twice the Citizen*, 83.

<sup>&</sup>lt;sup>33</sup>House of Representatives, Hearings before Subcommittee of the Committee on Armed Services, "National Reserve Plan," 84th cong., 1st sess., 1282. As quoted in Crossland and Currie, *Twice the Citizen*, 122.

<sup>&</sup>lt;sup>34</sup>"The Organized Reserve in the War," RG 319, Entry 343, Box 106. As quoted in Crossland and Currie, *Twice the Citizen*, 67.

Service Act of 1948; the adoption of an all-volunteer force to Desert Shield/Storm; operational use of the USAR during Desert Shield/Storm; post Desert Shield/Storm to the World Trade Center attacks on September 11, 2001; and finally the ongoing GWOT.

Maintaining and achieving Reserve readiness has historically required money, troops, and time. National policy and past mobilization experiences have guided USAR policy and practices. Effective management of unit manning, time, and slowness to adopt change are historical issues that have plagued the USAR readiness efforts. <sup>35</sup>

## World War II to end of the Selective Service Act of 1948

During the huge build up in World War II, the officers of the Officer Reserve Corps (ORC) furnished one quarter of the officer strength assigned to the Army of the United States. Interwar neglect of funding and training resulted in an ORC that was not ready to be activated as planned. None of the units that ORC officers were assigned to and organized in prior to the war were mobilized using draftees as planned. By the time the units were ready to deploy in 1942, most of the ORC officers had been assigned to AC units as fillers, and the ORC units were filled entirely with draftees. The ORC units mobilized void of their peacetime officers and associated to the ORC in name only.

After World War II, Army planners needed to answer how to use the Reserve to support national defense balanced against congressional desires and public will.<sup>36</sup>
Historically the United States did not maintain a large standing army. Drafting of

<sup>&</sup>lt;sup>35</sup>Manning is having the a deployable Soldier in the right postion with the right training. This term includes the subsets of managing IMA and IRR, cross-filling TPUs, effective school management, and FTS manning.

<sup>&</sup>lt;sup>36</sup>Crossland and Currie, *Twice the Citizen*, 78.

untrained men of military age was seen as the way to maintain the historical precedent of no large standing army and allow for building a large military force in times of need.

However, drafting untrained men to build military forces requires time.

After World War II the balance of power shifted to the United States. Soviet threats to Western Europe changed the readiness posture of United States military forces. A slow build up of forces would not have the agility required to react to a Soviet attack. This required a re-evaluation of the military force structure and emphasized the need to shorten the time to mobilize units for war. President Harry S. Truman and the Congress were at odds with recommendations from the War Department that advocated for financial support to a strong Reserve force. <sup>37</sup>

Between World War II and the Korean War Congress desired national defense to be as cheap or as cost effective as possible. The use of nuclear weapons and a potent smaller Active Army reinforced by a strong Reserve force was the force structure chosen. Unfortunately, congressional funding for the Organized Reserve divisions was held back and the level of readiness of the Organized Reserve fell. As part of the Organized Reserve readiness plan, Reserve units were organized into status classifications: A-1, A-2, B, and C. At the inception of the Organized Reserve, units were only allowed to be

<sup>&</sup>lt;sup>37</sup>Ibid., 80.

<sup>&</sup>lt;sup>38</sup>Ibid., 81.

<sup>&</sup>lt;sup>39</sup>A-1 classification was for service units and allowed a full compliment of officers and men, A-2 classification was for combat units and allowed a full compliment of officers and men, B classification consisted of service and combat units that acheived 100 percent officer and enlised cadre manning with some additional enlisted or about 60 percent manning, C units were service and combat units limited to officer manning and contained no assigned enlisted.

manned with officers (designated as C). This resulted in the Organized Reserve units closely resembling pre-World War II ORC units. All enlisted Soldiers were placed in an enlisted active pool or reservoir. These actions by the Organized Reserve were in response to the competition for congressional dollars between NG and Organized Reserve forces. 40 Only when the NG failed to meet readiness goals would Organized Reserve divisions be allowed to start manning above C levels. The Organized Reserve Divisions would be designated B level only after attaining 80 percent fill in commissioned and non-commissioned officer manning. Reaching A level meant the division must have 100 percent of the Commissioned and Non-Commissioned Officers and 40 percent authorized enlisted strength. <sup>41</sup> In 1947, 59 of 6843 company-sized units were able to achieve the manning to become "A" rated. Making up the 59 A Units were 580 of the 739,289 total members of the Organized Reserve. The inability of the units to fill with Soldiers left huge numbers of hollow units requiring fillers if mobilized. Adding to this problem was the lack of funding to support equipping and training. 42 The lack of funding for training meant that the Organized Reserve units were not receiving collective training and members were not much better than new conscripts. MOS and Soldier assignment in units of the Organized Reserve bore little resemblance to the Table of Organization, a fact that also hindered readiness and training.<sup>43</sup>

<sup>&</sup>lt;sup>40</sup>Crossland and Currie, *Twice the Citizen*, 86.

<sup>&</sup>lt;sup>41</sup>Ibid., 87.

<sup>&</sup>lt;sup>42</sup>Ibid., 88.

<sup>&</sup>lt;sup>43</sup>Ibid., 89.

In 1948 the Department of the Army established priorities for the newly approved Initial Active Duty for Training funding. Second on the list was funding for "Individuals with mobilization assignments as filler personnel for Regular Army and National Guard divisions." On June 24, 1948, Congress enacted the Selected Service regulations that would eventually provide obligated and MOS trained men to fill Organized Reserve units. 45

In July 1950, in response to immediate manpower needs of the Korean War, President Truman ordered a partial mobilization of the Organized Reserve to active service. 46 Unlike World War II, entire Organized Reserve units were activated and sent into combat. The rationale for deploying cohesive units was that they would be better suited to re-deploy to any war location. 47 The fairness of activating individuals in the Organized Reserve posed problems and resulted in the ORC G-1 proposing priorities for ORC members involuntarily activated as fillers. Volunteers to fill unit vacancies would be utilized first, followed by reservists associated with units. The next utilization would come from active and inactive reserve members with less than 12 months World War II service. The last source of fillers would come from active and inactive ORC members not associated with an ORC unit. 48 The priority listing that was eventually adopted remained unchanged except for those ORC members associated with a unit. Associated ORC

<sup>&</sup>lt;sup>44</sup>Ibid., 92.

<sup>&</sup>lt;sup>45</sup>Ibid., 94.

<sup>&</sup>lt;sup>46</sup>Ibid., 96.

<sup>&</sup>lt;sup>47</sup>Ibid., 97.

<sup>&</sup>lt;sup>48</sup>Ibid.

members would to be sourced last to ensure individual reserve members were not be stripped from their units, thereby ensuring cohesive units for deployment. Taking Solders out of units was seen as affecting the ability of units to conduct collective training in preparation for full mobilization. The officer requirements of the AC in the Korean War outstretched the ability of the ORC to fill individual positions in active duty units with inactive and volunteer members. Political and military realities of the times meant that the only recourse for the ORC was to call up reserve members in a pay status first even if it meant a risking overall readiness.<sup>49</sup>

As a result of problems during the Korean War mobilization, Congress passed the Armed Forces Reserve Act of 1952. This eliminated the ORC and Enlisted Reserve Corps and redistributed the Federal Reserve into the Ready Reserve, Standby Reserve, and Retired Reserve. The President or Congress now had the authority to activate the Ready Reserve in the event of a national emergency. Only Congress could activate the Ready and Standby Reserve for other than a national emergency. The Armed Forces Reserve Act of 1952 also ensured cohesive units by declaring "members of units organized and trained for the purpose of serving with a unit shall be ordered involuntarily into active duty only with their units" as codified in Public Law 82-476 Sec. 233 (g). 51

The Reserve Act of 1952 was amended by the Reserve Act of 1955 to add

Reserve duty to all active duty enlistments. Several options were now available for the

conduct of the obligated Reserve duty. The purpose of the new enlistment options was to

<sup>&</sup>lt;sup>49</sup>Ibid., 110.

<sup>&</sup>lt;sup>50</sup>Ibid.

<sup>&</sup>lt;sup>51</sup>Public Law 82-476, Sec. 233 (g).

increase the strength of the Army Reserve with trained members with active duty experience. <sup>52</sup> Unit enlisted membership attendance problems, caused by low pay and lack of motivation, resulted in unit recall personnel strengths less than what was being reported. Members did not feel compelled or obligated to attend unit training. In response Public Law 84-305 Sec. (2b) obligated Reserve members to attend training and authorized extending the service obligation if the Soldier failed to meet his requirement. <sup>53</sup>

Adding to the difficulties of readiness was the reorganization of the Reserve forces. During reorganization, the overall readiness of the Reserve would fall until individuals could be reassigned or re-qualified. Army Reserve organizational changes have traditionally been accomplished at a slower rate and a later date than the AC. The Reserve completed reorganizing to Pentomic Divisions<sup>54</sup> structure one year after the concept had been abandoned by the Active Army.<sup>55</sup> Army structure determines the manning and training requirements for units. Changes in the structure typically cause a reduction in readiness when units reorganize and adjust to the changes. The manning levels of the Army Reserve were deliberately kept at a level under full strength based on the planning idea that three fourths of the Reserve units would have six months to mobilize. The manning allowance for the 10 Reserve infantry divisions was 60 to 53

<sup>&</sup>lt;sup>52</sup>Crossland and Currie, *Twice the Citizen*, 124.

<sup>&</sup>lt;sup>53</sup>Ibid., 125.

<sup>&</sup>lt;sup>54</sup>There were three types Airborne, Infantry and Armored. The Pentomic division combined the regiment with the battalion to form five heavy battalions (battle groups) capable of independent action under divisional control Loss of capability would be offset with tactical nuclear weapons.

<sup>&</sup>lt;sup>55</sup>Crossland and Currie, *Twice the Citizen*, 134.

percent and all other units would be manned at an allowable rate of 53 percent or less. The Berlin Crisis required the activation of 15,734 individuals to fill the MOS specialty gaps that existed in Reserve units due to the mandated low manning goals. Automated central personnel record keeping had not yet been adopted in the Army and was a contributing factor to MOS mismatches during the Berlin Crisis. The Herbert subcommittee in 1961 declared that the lack of Army unit and individual readiness data was the number one factor in the MOS mismatch of mobilized individuals. Secretary of Defense Robert McNamara wrote in his 1962 annual report that Reserve units were at 70 percent of their authorized strength and only required 30 percent to be cross-filled from the individual reservists for deployment. McNamara declared this the highest state of readiness achieved to date for the Reserve. The readiness findings of Secretary McNamara were later disputed in a 1972 Research Analysis Corporation study that concluded the Reserve system in 1961 was woefully inadequate to meet the challenges of modern war.

When reorganization of the Reserve resumed after the Berlin Crisis, Secretary McNamara planned to make the Reserve more efficient by eliminating the Army Reserve component and merging the existing units and Soldiers into the Army NG. <sup>59</sup> The goal of the merger was to decrease the time required to replenish the strategic reserves of manpower. Additionally manning levels of the combined Army Reserve and NG,

<sup>&</sup>lt;sup>56</sup>Ibid., 139.

<sup>&</sup>lt;sup>57</sup>Ibid., 147.

<sup>&</sup>lt;sup>58</sup>Ibid., 148.

<sup>&</sup>lt;sup>59</sup>Ibid., 143.

comprising 100 percent of the Reserve Soldiers, could be increased from 80 to 100 percent. Only in units supporting other services and the mobilization base would allowed manning go to 75 and 70 percent respectively. <sup>60</sup> The merger of the reserve components under the NG and the elimination of the United States Army Reserve were not executed. Original arguments for the merger of the Reserve and NG claimed that manning and readiness would improve with a decline in force structure. Arguments against the merger cited a real risk of decreased readiness while reorganizing. <sup>61</sup> Congress did not agree with the Reserve and NG merger as they thought it would reduce national defense readiness. Congress blocked the merger and instead enacted a reserve call-up provision in the Fiscal Year 1967 defense appropriations bill (HR 15941) that established the size of Reserve at 260,000. <sup>62</sup>

The changes made in Reserve forces in the 1960s laid the groundwork for the Total Force concept of the 1970s. President John F. Kennedy's strategy planned to have conventional Active Army forces augmented by the Reserve components. Army planners began reorganizing once President Kennedy put the priority of defense over the needs of a balanced budget. The Reserve would also provide the source pool for large-scale national mobilization. The reorganization of reserve components included reducing overall divisions to allow for higher required manning levels of the remaining divisions. <sup>63</sup>

<sup>&</sup>lt;sup>60</sup>Ibid., 166.

<sup>&</sup>lt;sup>61</sup>Ibid., 171.

<sup>&</sup>lt;sup>62</sup>Library of Congress, "CQ Almanac Online," http://library.cqpress.com/cqalmanac/document.php?id=cqal66-1302215 (accessed April 16, 2014).

<sup>&</sup>lt;sup>63</sup>Crossland and Currie, *Twice the Citizen*, 150-151.

The Army Reserve budget was also increased to allow for training, manning, and equipping 10 high priority divisions with three-, five-, and eight-week call-up times. 64

The idea was to have trained and ready forces available to immediately double the size of the Active Army. The realignment of the Army Reserve was needed to make them more responsive to national strategic plans and increase Army Reserve readiness closer to AC units. 65 A new priority system was developed to reflect the new force structure. Priority I and II units were designated Immediate Reserve units. Priority III included the remaining units, Reinforcing Reserve, to be activated during full national mobilization. To reduce the need for individual fillers, the Ready Reserve Mobilization Reinforcement Pool of individual reservists was subdivided into high and low priority. Priority III units could not take obligated reservists out of the Ready Reserve Mobilization Reinforcement Pool.

This ensured an obligated reservist would fill priority I and II units first. 66

Public Law 88-110 amended the Armed Forces Reserve Act of 1962, resulting in the REP-63 program. REP-63 permitted reservists to conduct as much active duty training as necessary to become MOS qualified. MOS reclassification for a reservist allowed them to joint units within a geographical area and decrease MOS mismatches.<sup>67</sup>

Without congressional approval, Secretary of Defense Robert McNamara inactivated 751 Army Reserve units and authorized the establishment of Reinforcement

<sup>&</sup>lt;sup>64</sup>Two divisions would be available for combat in three weeks after notification, two divisions in five weeks, and six additional divisions in eight weeks.

<sup>&</sup>lt;sup>65</sup>Crossland and Currie, *Twice the Citizen*, 152.

<sup>&</sup>lt;sup>66</sup>Ibid., 149.

<sup>&</sup>lt;sup>67</sup>This provission is most likely the origin of the current TPU and IRR mileage assignment restrictions.

Training Units using the reservists from the deactivated units. Also established by McNamara was the 150,000 man Selected Reserve Force. 68 Selected Reserve Force units were now authorized to carry 100 percent of their authorized unit positions.<sup>69</sup> Selected Reserve Force units also received top priority for initial and MOS training for unit members. Unfortunately, the Army had still not converted Army Reserve units to modern TOE. The AC and Army Reserve units were still out of sync and becoming less compatible as the AC modernized. 70 The ultimate solution was for the Army Reserve to adopt General Staff series TOE and reorganize the Army Reserve into Combat Service Support under the Three Brigade Plan. The Army Reserve was primarily Combat Service Support but retained some combat units at the insistence of Congress. The Immediate Reserve authorizations for manning were changed to 80 percent and in the Reinforcing Reserve to 50 percent. The Three Brigade Plan authorized all units to man to 90 percent or higher. This is a shift from the previous policy of keeping manning levels low to keeping numbers high. The first groups of Selected Reserve Force units were reportedly able to achieve 100 percent personnel fill. Following Selected Reserve Force units increased readiness in most of the units. The down side to the plan was that non-obligated

<sup>&</sup>lt;sup>68</sup>The Selected Reserve Force consisted of three divsions and six seperate brigades of National Guard (118,484 Soldiers) and Army Reserve (31,519 Soldiers). The Army Reserve provided mostly combat service support units.

<sup>&</sup>lt;sup>69</sup>Formerly 70 to 80 percent personnel fill was allowed.

<sup>&</sup>lt;sup>70</sup>Crossland and Currie, *Twice the Citizen*, 176.

reservists began to drop out of units due to the higher training time commitment required.<sup>71</sup>

Filling manning vacancies in deploying units, even while the draft was still law, was politically and legally a problem. To help resolve the legal issues of activating Reserve units, the Russell Amendment to the Armed Forces Reserve Act of 1952 was passed. This gave the president the authority to activate units of the Ready Reserve for a maximum of 24 months without congressional approval. A further June 1967 amendment to the Universal Military Training and Service Act gave the president the authority to order the mobilization of individual members of the Reinforcing Reserve for a maximum of 24 months. <sup>72</sup> Both of these amendments provided the Reserve the manpower necessary to mobilize fully manned units.

A portion of the Army Reserve was mobilized for the War in Vietnam in 1968. Not many of the units activated were at 100 percent fill, so most units required filler personnel. Since there was no national emergency declared, the personnel would come first from personnel residing in the IRR pool that still had a service obligation. One of the primary faults of the Vietnam activation was the practice of fusion. Units could and were broken up, and members dispersed to prevent hometown tragedies and distribute

 $<sup>^{71}\</sup>mbox{Drills}$  or Battle assemblies were 72 per year in Select Reserve Force units in May 1968.

<sup>&</sup>lt;sup>72</sup>Crossland and Currie, *Twice the Citizen*, 197-8.

<sup>&</sup>lt;sup>73</sup>Of the 4,132 screened, 1,692 were assigned to mobilized USAR units. The remaining 1,800 postions were filled with AC personnel. Crossland and Currie, *Twice the Citizen*, 204.

<sup>&</sup>lt;sup>74</sup>Crossland and Currie, *Twice the Citizen*, 204.

special MOS skills throughout the AC. Fusion affected the unit morale and cohesion of the mobilized Army Reserve units. Unit cohesion, when allowed to deploy as a unit, allowed Reservists to succeed against adversity. Unit cohesion was viewed as the main strength of Army Reserve units deployed to Vietnam.<sup>75</sup>

From the end of World War II to the beginning of the all-volunteer Army, national defense was balanced against Congressional desires and public will. During the period the Army expenses for readiness needed to be as cheap and cost effective as possible. The Army Reserve was maintained as a strategic force pool for possible ground war that was thought less likely due to integration of tactical nuclear weapons. Army fiscal policies and the lack of resources for the Army Reserve reflected the low priority placed on ground forces. When Reserve units were mobilized for duty in Korea, MOS and Soldier assignments further highlighted readiness problems of the strategic reserve polices. In defense of maintaining the Army Reserve after the Korean War mobilization, Congress passed the Armed Forces Reserve Act of 1952 codifying the Ready Reserve, Standby Reserve, and Retired Reserve. The Reserve Act of 1955 legally obligated reserve duty to all enlistments and increased reserve affiliation options. During the Berlin crisis mobilization, the lack of Army Reserve unit and individual readiness data highlighted shortfalls in the mobilization process. Allowed manning levels were eventually replaced with mandated minimum manning levels to meet war-time readiness requirements. The Army Reserve began aligning operations with the AC by making changes to Army Reserve TOE and adding more Combat Service Support. The involuntary activation of IRR was still politically and legally a problem. The Russell

<sup>&</sup>lt;sup>75</sup>Ibid., 208.

Amendment to the Armed Forces Reserve Act of 1952 authorized the president to activate Ready Reserve units. Some of the late activating Reserve units that were mobilized for the War in Vietnam were broken up, and the personnel were used as fillers for deployed active and Reserve units.

## The end of Selective Service to Desert Shield/Storm

The decision to repeal the Selective Service Act of 1948 and transform to an all volunteer force provided an opportunity for the Army Reserve to make policy changes  $^{76}$ that enhance support to the AC. The force policies announced on September 8, 1970, should not be confused with the comprehensive Army Total Force Policy in Army Directive 2012-08. It was assumed by a presidential committee in 1970 that the size of the pre-Vietnam War Army would no longer be needed. As the Army down-sized, between 1970 and 1973, there would be an influx of qualified AC separated servicemen that were expected to fill the Army Reserve ranks if volunteers were not available. The lack of centralized USAR readiness data made it difficult to assess the actual effects the end of Selective Service Act had on manning units. Prior to the repeal of the Selective Service Act, material readiness and availability in the USAR was the primary focus for readiness. After the repeal of the Selective Service Act the focus of maintaining readiness shifted toward improving personnel strength. The Ready Reserve went from a high strength of 263,299 in June 1971 to 185,753 in September 1978. The IRR suffered even greater man power losses going from 1,059,064 in June 1972 to 338,874 in June 1977. The repeal of the Selective Service Act reduced the total manpower available while the

<sup>&</sup>lt;sup>76</sup>Crossland and Currie, *Twice the Citizen*, 212.

parallel Army Force Policies increased the Army Reserve's contribution to and responsibility for defense.<sup>77</sup>

The Army Forces Policy, as set forth by Secretary of Defense Melvin Laird, reconnected the economic link between keeping defense costs down and the effectiveness of using the Reserve over maintaining a large standing Active Army. A large Reserve force was seen as cheaper way to support a large number of troops. Reservists, although having the same initial training costs, did not have the same overhead associated to active service personnel. Selected USAR and NG Soldiers would be used rather than draftees as the initial source of man power in the event of a national emergency to expand the size of the AC. This reinstated the traditional use of the Reserve prior to 1965 while supporting efforts to reduce overall defense costs. <sup>78</sup> The problem of achieving readiness levels in the Army Reserve equal to active forces was still not solved and was considered unachievable by most. To help overcome the readiness problem, the FTS, assigned to carry out essential readiness support tasks, was increased. Chapter 11 Section 265 Title 10 United States Code increased FTS in 1973 under the STEADFAST program with the sole purpose of improving Army Reserve readiness. <sup>79</sup> One of the first areas to receive an increase in FTS was United States Army Recruiting Command. It was not until 1978 that FTS unit training managers began to be assigned to units to improve readiness. Later FTS would be added in maintenance, supply, and training to support the overall readiness at the company level. Battalions would receive FTS to manage and plan training to support

<sup>&</sup>lt;sup>77</sup>Ibid., 231.

<sup>&</sup>lt;sup>78</sup>Ibid., 215.

<sup>&</sup>lt;sup>79</sup>Ibid., 221.

the Total Force concept. The increase of FTS personnel was in direct reaction to the low readiness levels and historically low percentage of FTS in the Army Reserve as compared to other Reserve components. The correlation between low percentage of FTS and low readiness levels was made by Major General William R. Berkman, the Chief of the Army Reserve in 1980. Increasing the FTS was cited by Major General Berkman as having the greatest potential for improving readiness. In 1979 a career program, Active Guard Reserve (AGR), for full-time uniformed reservist was formed. <sup>80</sup>

To support readiness in the Reserve, Army Readiness Regions (ARR) and Readiness Groups were formed in 1973. This transformed how the AC advised, evaluated, and assisted the Army Reserve to improve readiness. The ARR and Readiness Groups replaced battalion-level advisors sourced from active duty officers. The 37 ARR and Readiness Groups contained approximately 8,200 members lacking a postmobilization mission. The 37 ARR and Readiness Groups would be a source for individual replacements and cross-fillers during a mobilization. The problem was the rank structure of the ARR and Readiness Groups duplicated some of the general officers filling Army Reserve Commands, making them not assignable in the event of war. Therefore, the ARR were eventually eliminated, and more mobilization responsibilities were given to the Army Reserve Commands. <sup>81</sup> To further enhance personnel management, the Army established the Army Reserve Personnel Center in 1983 to provide career management for the AGR, the IRR, and IMAs. <sup>82</sup>

<sup>&</sup>lt;sup>80</sup>Ibid., 222.

<sup>&</sup>lt;sup>81</sup>Ibid., 229.

<sup>82</sup> Ibid.

The Army Reserve also conducted affiliation <sup>83</sup> and round out <sup>84</sup> programs in the 1970s to improve unit readiness. With the formalization of the CAPSTONE affiliation program, reserve units were now included in contingency operations plans in support of the requirements to support the North Atlantic Treaty Organization. The time line for mobilization and deployment was 90 days after initiation of hostilities. This set the stage for the transition from a Strategic Army Reserve to an Operational Reserve Force. <sup>85</sup> With the introduction of Army Training and Evaluation Programs, the Reserve unit's performance was measured objectively by the ability of the unit to perform wartime mission tasks. Effective manning and readiness both became critical for the ability of a unit to successfully perform wartime Army Training and Evaluation Program tasks. Any Reserve unit that had low manning rates also did not have the personnel to perform Army Training and Evaluation Program tasks successfully.

From the repeal of the Selective Service Act to Desert Shield/Storm, the Army Reserve experienced personnel turbulence and began aligning forces operationally. The transformation from Selective Service to an all-volunteer force and the adoption of related policies and procedures affected MOSQ unit readiness. The lack of a centralized Army Reserve readiness information database continued to make it difficult to assess the actual affects the repeal of Selective Service Act had on the force. The focus of readiness for the Army Reserve shifted from equipment to personnel strength as personnel

<sup>&</sup>lt;sup>83</sup>Working/training relationship between AC and RC units. Also conducted within AC often between corps seperate brigade units (Combat Engineer Platoon) and divsion manuver units (Cavalry Squadrons).

<sup>&</sup>lt;sup>84</sup>A Reserve unit replaces an AC unit at brigade or division level.

<sup>85</sup> Crossland and Currie, Twice the Citizen, 256.

declined. STEADFAST and programs like it attempted to address improving Army Reserve readiness by increasing FTS. Army Readiness Regions were formed to assisted Army Reserve units in improving individual and collective training readiness. The new Army Reserve Personnel Center now provided career management for AGR, IRR, and IMA Soldiers. Finally, Army Reserve units were now included in contingency operations plans, and Army Reserve units' readiness metrics were evaluated against the same standards as the AC.

# Desert Shield/Storm

After the collapse of the Soviet Union, the United States National Security

Strategy shifted toward emerging regional and ethnic crises. The structure and equipping of the Total Force required it to be flexible to these emerging needs. Transformation in the Army is slow, and the Army that deployed to Desert Shield/Storm was the same one that was trained and equipped to defeat Soviet forces using the AirLand Battle concept.

The Reserve units activated during Desert Shield/Storm were used operationally for the first time since the Korean War. From August 1990 to June 1991 a total of 1,045 units containing 145,000 Reservists and 22,000 individual Ready Reservists were mobilized by President George H. W. Bush for active duty in support of Desert Shield/Storm. The alert to activation time for the 1,045 Army Reserve units ranged from two to 161 days and averaged 11.7 days. To meet Desert Shield/Storm personnel needs, 70 retired Reservists were involuntarily recalled to active duty. President Bush's activation also

<sup>&</sup>lt;sup>86</sup>Coker, *The Indispensable Force*, 14.

<sup>&</sup>lt;sup>87</sup>Ibid., 15.

allowed the IRR pool to be sourced for individual fillers for units. In the 1,045 Reserve units activated containing 145,000 Soldiers, approximately 15 percent of the Soldiers were IRRs. <sup>88</sup> An additional 10,000 Soldiers, or approximately 6 percent of 145,000, volunteered for duty from Troop Program Unit (TPU), IMA, IRR, and Retired Reservists pools. The success of the ability of the Reserve units to cost-effectively equip, man, and train during peace time and quickly mobilize the balance of forces needed to support the AC was attributed by President Bush to the previous two decades' force polices. <sup>89</sup>

Reserve mobilizations for Desert Shield/Storm were generally successful, but the belief that Army Reserve units and Soldiers were really a strategic asset and not immediately available as deployable forces prevailed. The use of IRR Soldiers was normally limited to declared national emergencies. Army Reserve planners had assumed that fillers would come from the IRR. The Army Reserve operated during the first six months of Desert Shield/Storm without the authorization to draw from the IRR pool.

Logistic Unit Productivity System units, a holdover concept from the Cold War, contained a cadre of TPU to be filled with IRR Soldiers during mobilization. These units were not successfully mobilized for Desert Shield/Storm. <sup>90</sup> Some specialty Reserve units <sup>91</sup> had only parts or teams of their units activated. Once the activation of IRR Soldiers was authorized, the Army Reserve Personnel Center, working with Total Force

<sup>&</sup>lt;sup>88</sup>Ibid., 16.

<sup>&</sup>lt;sup>89</sup>Ibid., 17.

<sup>&</sup>lt;sup>90</sup>Ibid., 33.

<sup>&</sup>lt;sup>91</sup>Specialty units inlcude hospital units, dental, transportation, petrolium and water handling, military police, CBRN decontainination, and linguists.

Personnel Command, generally ignored the old mobilization system that existed while filling vacancies in units. 92 Mobilization of IMAs, 2,364 in total, was also problematic in that the process and authorization was unclear to Department of the Army agencies. The lesson learned filling vacancies in units was that the earlier the Army had access to the IRR pool the more successful the mobilization process would be.

During Desert Shield/Storm mobilization, some units suffered gaps in low density critical MOSs that were never filled. 93 To alleviate the problem of availability of DMOSQ, a series of shortened MOS courses were conducted by the Army Reserve Forces School to award the MOSs. During operational use it was discovered that the shortened MOS courses did not adequately train the Soldiers to the skill level required, and the practice was abandoned.

The victory of the Desert Shield/Storm campaign highlighted the successes of the policies from the preceding two decades of Army Reserve manning, training, and equipping strategy. Desert Shield/Storm also saw the Army Reserve relearn past mobilization difficulties and problems with respect to DMOSQ levels, manning, activating IMAs, and IRR activations.

### Post-Desert Shield/Storm to 9/11

A 1992 study of current force policies determined, in contradiction to lessons learned from Desert Shield/Storm, that the active force should be rapidly deployable and

<sup>&</sup>lt;sup>92</sup>Coker, *The Indispensable Force*, 33.

<sup>93</sup> Ibid.

sustain operations for 30 days without reserve component support. <sup>94</sup> In contrast, Desert Shield/Storm proved the value of an operational Army Reserve in support of the AC. The Army decided to reduce the Total Force following Desert Shield/Storm while maintaining capable Reserve forces. In support of the downsizing of the AC, the Reserve would transition to an operational force. <sup>95</sup>

There were four important events affecting the transformation of the USAR in the early 1990s. The four events were the Base Force Plan, recommendations contained in the Bottom-Up Review, the outcome of the Off Site Agreement in 1993, and the recommendations from the *Report of the Commission on the Roles and Missions of the Armed Forces*.

The Base Force Plan, announced by the Chairman of the Joint Chiefs of Staff General Colin L. Powell, supported the full spectrum threat-based National Military Strategy. The Base Plan called for a smaller tailored force of active and reserve forces with an emphasis on readiness. <sup>96</sup> The Base Force Plan set the trend toward achieving defense goals with a smaller capable Total Force and solidified the support of reserve forces to the AC.

The second milestone was Secretary of Defense Les Aspin's 1993 *Report on the Bottom-Up Review* that set the fiscal policy for the rest of the decade. The size of the Total Force would be based on regional contingencies, peace enforcement/intervention, and maintaining a forward presence. The Bottom-Up-Review was the catalyst that

<sup>&</sup>lt;sup>94</sup>Ibid.

<sup>&</sup>lt;sup>95</sup>Ibid.

<sup>&</sup>lt;sup>96</sup>Ibid., 47.

established the size of Army Reserve TOE units at 152,000 and the end strength Army Reserve at 208,000. The new, smaller Army Reserve would require increased readiness to reduce the overall risk to national defense and control the costs of a smaller Active Army. The Army Reserve would expand to provide maximum integrated support to joint combat forces and the AirLand Battle concept. <sup>97</sup> Additionally, Army Reserve units would now be properly budgeted and funded to support this operational mindset.

The third milestone was the October 29, 1993, Off Site Agreement hosted by the Vice Chief of Staff, Army General J. H. Binford Peay III. The offsite meeting defined and established the Army Reserve end strength at 208,000 by 1998 and further restructured the Reserve components. Most of the NG service and support units were moved into the Army Reserve while combat and aviation units moved into the NG. The transfer of units was started in 1994 and completed by 1996. The restructuring ensured that the Army Reserve would become an operational unit Contingency Force Pool (CFP) ready to provide service support to the active components. It was calculated that by reducing the number of MOSs contained in the Army Reserve there would be improvements in readiness and the ability to project forces. 98

The fourth milestone event was a further refinement of the role of the Army Reserve. Recommendations contained in the 1995 *Directions for Defense: Report of the commission on the Roles and Missions of the Armed Forces* set policy for operational use

<sup>&</sup>lt;sup>97</sup>The AirLand Battle concept changed battle tactics to non-linear and asymetrical using highly mobile self-contained combat forces composed of lighter divisions and combined arms brigades. Headquarters, Department of the Army, Field Manual 100-5, *Operations* (Washington, DC: Government Publishing Office, 1986).

<sup>&</sup>lt;sup>98</sup>Coker, *The Indispensable Force*, 53.

of Army Reserve units. Army Reserve units' demonstrated readiness and availability using Mission Essential Task List assessments would now determine their use in actual contingency operations. Army Reserve units would perform and be evaluated against the same Mission Essential Task List tasks and standards as AC units.

As part of the Army Reserve transformation from strategic to operational force the Army Reserve began to concentrate on readiness for CFP units. CFP units were a mixture of AC, NG, and USAR support units that would be needed early in an operation. Army Reserve CFP units would therefore be kept at a higher state of readiness at the expense to non-CFP Army Reserve units. The cost of manning, training, and equipping an Army Reserve CFP unit was one third the cost for a similar capability within the Active Component. 99 CFP priorities were similar to the Army Forces Generation (ARFORGEN) model and were used to set priorities in manning, training, and equipping units. The CFP was manned with 19 percent Army Reserve units. By 1995 there were 475 Army Reserve units assigned to the CFP mission. The units received 115 percent of their authorized full time support and priority for TPU manning. The CFP units also received Active Army advisors to help improve training readiness under the BOLD SHIFT program. 100 BOLD SHIFT helped units improve DMOSQ skills and enhanced support of readiness requirements. 101 The CFP Army Reserve units increased their readiness levels by 28 percent over pre-CFP levels. 102 The Army Reserve units would

<sup>&</sup>lt;sup>99</sup>Ibid., 60.

<sup>&</sup>lt;sup>100</sup>Ibid., 80.

<sup>&</sup>lt;sup>101</sup>Ibid.

<sup>&</sup>lt;sup>102</sup>Ibid., 60.

maintain their priority for readiness until levels were met that would be required during activation. 103 CFP was the four-tiered readiness model used to prioritize training and resources for Army Reserve units. Tier 1 consisted of all Army Reserve units assigned to Crisis Response Forces (CRF) CFP packages I to IV. 104 Tier 2 consisted of Army Reserve units assigned to CFP packages V through VII. 105 Tier 3 consisted of Army Reserve training and support units. Tier 4 contained newly established Army Reserve units. The Priority Reserve in Mobilization Enhancement units received their resources based on their tier in the CFP readiness model. Units that had Priority Reserve in Mobilization Enhancement support and Office Chief Army Reserve—United States Army Reserve Command (USARC) oversight increased readiness by 20 percent in 1993. 106 The Force Support Package replaced the CFP in the late 1990s. Units were funded and maintained on a first-to-fight basis and tiered similar to CFP. Tier 1 Army Reserve units would have 100 percent funding, FTS manning, and priority for school allocations. Lower Tier units would receive resources based on their position on their operation time phased force deployment list. 107 Readiness levels in Army Reserve CFP to

<sup>&</sup>lt;sup>103</sup>Ibid., 61.

<sup>&</sup>lt;sup>104</sup>Latest Arrival Date (LAD) less than 14 days. The days from notice of mobilization to Soldiers arriving at operation.

<sup>&</sup>lt;sup>105</sup>LAD 14-31 days.

<sup>&</sup>lt;sup>106</sup>OCAR-Office Chief Army Reserve. USARC-United States Army Reserve Command established in 1992. Units were mostly Special Operations forces, Civil Affaris, and psychological operation units. Coker, *The Indispensable Force*, 66.

<sup>&</sup>lt;sup>107</sup>Ibid., 191.

FSP units declined in DMOSQ fills by 2 percent due to vacancies after the reorganization. 108

In 1993, the Army Reserve Personnel Center developed a program to identify IRR members for filling manning shortages in deploying CFP units. 109 The IRR has no mandated end strength, and therefore was sized based on the pool of service members leaving active duty that still had a service commitment. 110 The IRR and IMA Reserve pools grew in size after the reduction of the Active Army after the post-Desert Shield/Storm draw-down. In 1994 Congress increased the presidential selected reserve call up, from 90 to 270 days. IRR activation was still limited to declarations of national emergency and partial mobilizations.<sup>111</sup> In response to reoccurring unresolved problems activating IRR Soldiers after Desert Shield/Storm, Section 511 of the Fiscal Year 1998 National Defense Authorization Act, the Individual Ready Reserve Activation Authority was created. This authority was created to address the problems with late deploying units that could and were used to provide individual fillers for early deploying units. Early deploying units would be able to draw from the IRR pool to fill vacancies in active and reserve component units. Section 12304 of Title 10 United States Code Title was amended to create a new subcategory of IRR called IRR mobilization category. This subcategory of 30,000 IRR Soldiers would be subject to involuntary presidential call to active duty under the Presidential selected reserve call up. IRR mobilization category

<sup>&</sup>lt;sup>108</sup>Ibid., 192.

<sup>&</sup>lt;sup>109</sup>Ibid., 66.

<sup>&</sup>lt;sup>110</sup>Ibid., 72.

<sup>&</sup>lt;sup>111</sup>Ibid., 215.

members would not need to be affiliated or required to attend duty with a TPU unit. IRR mobilization category members would also be authorized and funded to attend MOS and professional development training. <sup>112</sup> In 1998 the presidential selected reserve call up was amended to include involuntary call ups for events involving weapons of mass destruction. <sup>113</sup>

The post-Desert Shield/Storm drawdown also reduced the total number of FTS in the Army Reserve. The ratio of FTS to TPU fell from 14:1 to 13:1 from 1991 to 1994 respectively, resulting in a total of 20,082 FTS in the Army Reserve. <sup>114</sup> In 1990 only 56 percent of the FTS was funded for the Army Reserve. <sup>115</sup> The reduction in the end strength of the Army Reserve in the mid-1990s was also reflected in the reduction in personnel strength of the authorized Army Reserve FTS. During 1997 the FTS of the Army Reserve fell to the lowest levels among the Reserve Components since the start of the program even though 70 percent of the units were rated fully mission capable. The reduction in end strength was not able to offset the high attrition rates for enlisted Soldiers in the ranks of Private through Specialist. One of the biggest problems in 1999

<sup>&</sup>lt;sup>112</sup>Ibid., 183.

<sup>&</sup>lt;sup>113</sup>This change was made in the Strom Thurmond National Defense Authorization Act for Fiscal Year 1998. Coker, *The Indispensable Force*, 215.

<sup>&</sup>lt;sup>114</sup>There has been a correlation made in the past between readiness and percent/ratio of FTS in the Army Reserve. The Army Reserve historically has the lowest ratio of FTS of all the Reserve components.

<sup>&</sup>lt;sup>115</sup>Coker, *The Indispensable Force*, 77.

affecting readiness was the recruitment and retention of health care professionals in the Army Reserve. 116

United States Forces Command established the Ground Forces Readiness Enhancement training support system to replace BOLD SHIFT by 1998. 117 The Ground Forces Readiness Enhancement program measured operational and unit readiness through the evaluation of unit collective training. To assist Army Reserve unit commanders in objectively measuring readiness, the Reserve Components Training Strategy Task Force established an Army Reserve training action plan to improve mobilization readiness. 118 Specifically addressed by the training plan from 1991 to 1992 were strategies to improve MOS qualification levels in the Army Reserve, resulting in an independent school system for Army Reserve Soldiers. 119 To integrate the parallel lines of MOSQ training that existed in 1992 between the AC, NG, and USAR, the Chief of Staff General Sullivan established the Future Army Schools XXI (also know as The Army School System) concept. United States Army Training and Doctrine Command would manage the training for all Army components to equal standards while requiring fewer resources. 120 Changes that specifically addressed integrating DMOSQ training were developing component partnerships, allowing any Soldier to attend any school, establishing one academic standard across the components, and instituting catalog-based systems for

<sup>&</sup>lt;sup>116</sup>Ibid., 181.

<sup>&</sup>lt;sup>117</sup>Ibid., 81.

<sup>&</sup>lt;sup>118</sup>Ibid., 83.

<sup>&</sup>lt;sup>119</sup>Ibid., 84.

<sup>&</sup>lt;sup>120</sup>Ibid.

manning, training, and resources. <sup>121</sup> The components maintained their individual schools, but now the MOSQ training responsibility mirrored changes made during the Off Site Agreement. The Army Reserve would maintain officer training, health support, and combat and service support schooling. Further increasing Army Reserve access to MOS training and readiness was the congressionally mandated Title XI active support to the reserve training program. Advances in Army Reserve multifunctional brigade training schools, after the 1994 Army Reserve schools restructuring, expanded the regional training sites program started in the 1980s. MOS producing courses ran by the Army Reserve were now available that saved money and significantly increased Army Reserve readiness. <sup>122</sup> In 1997 the Reserve Associate Support Program improved readiness by providing Army Reserve units with obligated trained and experienced Soldiers. The Reserve Associate Support Program recruited and trained a Soldier for a two-year service in an active unit followed by a four-year commitment in an Army Reserve unit. <sup>123</sup>

The CAPSTONE affiliation program of the 1970s was also updated in the 1990s to the Overseas Deployment Training program. Overseas Deployment Training was designed to be conducted once every three years for early deploying units (CFP units) and once every five years for other units. IMA and IRR Soldiers could attend Overseas Deployment Training. The Army Reserve Personnel Center managed Overseas Deployment Training opportunities as individuals or with a TPU unit. 124

<sup>&</sup>lt;sup>121</sup>Ibid., 85.

<sup>&</sup>lt;sup>122</sup>Ibid., 94.

<sup>&</sup>lt;sup>123</sup>Ibid., 197.

<sup>&</sup>lt;sup>124</sup>Ibid., 98.

The 1997 *Quadrennial Defense Review* set to address aspects of the defense program including force readiness and reaffirmed the Army Reserve contribution to U.S. National Military Strategy. The *Quadrennial Defense Review* was based changes for the military on strategy and not driven by budget. Phase one, shaping operations, were now an essential part of the Army mission. Shaping operations promoted regional stability and helped prevent future conflicts. The Quadrennial Defense Review reduced the end strength established the Army Reserve size from 208,000 to 205,000 by 2000. 125 The *Quadrennial Defense Review* also stimulated the further integration of the Total Force. Secretary of Defense Cohen in 1997 directed the integration of Reserve and Active Components. One of the principles to be achieved in integration was leadership ensuring readiness in the Total Force. 126 The period between Desert Shield/Storm and 2001 saw the continued and increasing support to Army operations by the Army Reserve. Between 1989 and 1997 there was a 300 percent increase in the operational use of Army Reserve forces <sup>127</sup> outside the continental United States. Operations supported were a presidential call up for Haiti in 1994–95, United Nations peace-keeping mission to Sinai in 1994, and peacekeeping in Kosovo in 1999. By 1997, 31,000 Army Soldiers were deployed in 91 countries in support of missions outside the continental United States.

Reductions in overall Army Budget and shortages in school training monies in the late 1990s meant that units began prioritizing Annual Training funds. Individual Soldiers

<sup>&</sup>lt;sup>125</sup>Major General Max Baratz, "A Reorganized Army Reserve: Relevant and Ready," *1997-1998 Army Green Book*, October 1997, 97. As cited in Coker, *The Indispensable Force*, 172.

<sup>&</sup>lt;sup>126</sup>Coker, *The Indispensable Force*, 176.

<sup>&</sup>lt;sup>127</sup>Ibid., 173.

were funded using Annual Training dollars in lieu of attendance at unit Annual Training. This raised the unit DMOSQ readiness and individual technical skills but reduced effectiveness of unit collective training events. <sup>128</sup> DMOSQ levels were a key factor in determining unit readiness. Low budgets and the Force Support Package tier system had effects on the ability of units to conduct collective evaluation events. <sup>129</sup>

The readiness of the Army Reserve from the end of Desert Shield/Storm to the beginning of the GWOT was affected by decisions made in support the U.S. National Military Strategy. The new policies helped increase the Army Reserve's contribution to the U.S. National Military Strategy. High readiness levels for the Army Reserve were demanded by increased operational use rates of the Army Reserve for Army operations. Changes included resizing the Army Reserve, maintaining high readiness levels for CFP and later Force Support Package aligned Army Reserve units, congressional policy changes in the use of IRR members, lowering fill authorizations for Army Reserve FTS personnel, and institutionalization of DMOSQ training for the Army Reserve and Army Reservists. Austerity after the post-Desert Shield/Storm drawdown lowered overall resource allocations to the Army Reserve that affected the ability of the Army Reserve units to train individuals and units.

### The Global War on Terror

The beginning of the Global War on Terror began during a period when the Army Reserve had committed to the operational use of its forces. From September 11, 2001, to

<sup>&</sup>lt;sup>128</sup>Ibid., 184.

<sup>&</sup>lt;sup>129</sup>Ibid., 193.

the end of 2010, roughly 793,567 Army Reserve Soldiers were mobilized in support of GWOT operations Noble Eagle/Enduring Freedom/Iraqi Freedom. On December 8, 2010, the Army Reserve had approximately 12 percent of its forces mobilized. 131

The 2001 Quadrennial Defense Review continued making recommendations for the transformation of Army Reserve forces, which began after Desert Shield/Storm, based on a capabilities strategy. The Quadrennial Defense Review also recognized that sustaining high priority units had deprived the Army Reserve of resources that affect readiness and began to address some of the lingering readiness issues within the Army Reserve. Reserve. 133

The readiness of the Army Reserve prior to September 2001 was reported to be at an all-time high of 77 percent. At the same time, only 13 percent of the Army Reserve units were deemed non-deployable. <sup>134</sup> A partial mobilization of the Army Reserve was ordered by President Bush on September 14, 2001. The lessons learned from the delay in mobilization during Desert Shield/Storm influenced the decision to mobilize Army Reserve forces as early as possible. Mobilization times used for planning purposes became impossible to follow as the fluid situation after the September 11, 2001, attacks demanded Army Reserve units deploy within hours of notification. <sup>135</sup> Some Army

<sup>&</sup>lt;sup>130</sup>Ibid., 301.

<sup>&</sup>lt;sup>131</sup>Ibid., 299.

<sup>&</sup>lt;sup>132</sup>Ibid., 309.

<sup>&</sup>lt;sup>133</sup>Ibid., 310.

<sup>&</sup>lt;sup>134</sup>Ibid., 266.

<sup>&</sup>lt;sup>135</sup>Ibid., 267.

Reserve units needed to conduct hasty mobilization or officially mobilized after they arrived at the deployment location. <sup>136</sup> Eventually over 11,000 Army Reserve Soldiers would be on active service by the end of 2001. The large amounts of Army Reserve personnel volunteering for duty helped mitigate unit readiness shortfalls.

The *National Security Strategy* or "Bush Doctrine" enacted after the September 11, 2001 attacks directed the United States' defense planners to be prepared for independent unilateral military operations. Some Army Reserve Solders were involuntarily mobilized for operations in Afghanistan and Iraq. What had not changed were the continued difficulties in mobilization of Army Reserve units and shorter mobilization time lines. IMA and IRR mobilizations were also still challenging the systems that were in place. <sup>137</sup> Roughly 35 percent of all Army Reserve rotational units had been mobilized by 2003. <sup>138</sup> Of these Army Reserve units roughly half had less than fifteen days between notification and deployment. Unclear Geographical Combatant Command (GCC) requirements and rapid mobilization by the Army Reserve produced units that were not needed and turbulence in the mobilization systems. <sup>139</sup> In *A Statement on the 2005 Posture of the United States Army Reserve*, poor practices of the past for mobilizing, training, and man-power management continued to plague the mobilization process. <sup>140</sup>

<sup>&</sup>lt;sup>136</sup>Ibid.

<sup>&</sup>lt;sup>137</sup>Ibid., 288.

<sup>&</sup>lt;sup>138</sup>Ibid., 293.

<sup>&</sup>lt;sup>139</sup>Ibid., 299.

<sup>&</sup>lt;sup>140</sup>Ibid., 326.

To improve overall readiness metrics, the Army Reserve, in 2003, initiated a category for unready Soldiers, which provided 4,000 programmed spaces that would be used for accounting for TTHS, without reducing unit readiness. The intended purposes of the TTHS account were to improve the accuracy of DMOSQ reporting, improve unit readiness, improve unit capability, and reduce the management requirements for non-available Solders. <sup>141</sup> The 4,000 TTHS spaces account for less than 0.02 percent of the total 205,000 USAR positions authorized.

In response to emerging needs, readiness problems, and mobilization issues, the Army Reserve in 2004 initiated a new force generating strategy called Army Reserve Expeditionary Force (AREF). The AREF predated ARFORGEN and was used in parallel with it. The AREF organized 10 Army Reserve force packages that would maintain two packages available at any one time for deployment. The package also helped ARFORGEN<sup>142</sup> cycle unit management for the Army Reserve that prioritized and determined resources. <sup>143</sup> Although AREF is rather successful at generating and managing forces, the Army Reserve only utilized it for 31.5 to 78 percent of the total Army Reserve forces mobilized between 2004 and 2011. <sup>144</sup>

<sup>&</sup>lt;sup>141</sup>Ibid., 351.

<sup>&</sup>lt;sup>142</sup>The originally planned ARFORGEN Steady State deployment-to-dwell ratio 1:5 was for USAR forces.

<sup>&</sup>lt;sup>143</sup>The AREF training for individuals in year one is DMOSQ courses, professional schools, and training. During year two and three, individuals conduct company level and higher collective training. During year four, individuals conduct complex squad and section training. During year five, units are fully trained and available.

<sup>&</sup>lt;sup>144</sup>Coker, *The Indispensable Force*, 341.

The 2005 Quadrennial Defense Review provided planners with the way ahead for the Army Reserve. The Army Reserve would concentrate on being lighter, agile, deployable, and streamlined with the joint multinational forces. The new strategy and doctrine directly affected manning, training, and education within the Army Reserve. Army Reserve units would need to become more available and deployable. The Total Force was therefore reconfigured to finalize the transformation of the Army Reserve to an operational force and no longer used as a strategic reserve. As part of the plan the presidentially selected reserve call up was revised, authorizing increased durations for volunteers for activation (IMA and IRR), and to develop high priority Army Reserve units with short deployment capabilities. 146

The 2006 and 2010 National Security Strategy adopted a multilateral approach to the GWOT without reducing the need to mobilize and deploy Army Reserve forces in support of Active Components. <sup>147</sup> The 2010 Quadrennial Defense Review further restated the 2005 Quadrennial Defense Review requirement for an operational reserve that is available and ready to deploy. This resulted in the recommending adoption of the ARFORGEN force generation model for the Army Reserve. In recognition of the challenges of adopting ARFORGEN in the Reserve, the DoD began studies to determine the readiness challenges of employing the Army Reserve units on a rotational basis. <sup>148</sup> In

<sup>&</sup>lt;sup>145</sup>Ibid., 311.

<sup>&</sup>lt;sup>146</sup>Ibid., 312.

<sup>&</sup>lt;sup>147</sup>Ibid., 309.

<sup>&</sup>lt;sup>148</sup>Ibid., 314.

2006 deployable units were being used faster than they could be generated. <sup>149</sup> At the December 2006 Commission on the NG and Reserve, the Chief of Staff of the United States Army recognized that the Army Reserve was still utilizing outdated mobilization policies and practices. The practice of cross-leveling Soldiers to fill vacancies accounted for 62 percent of the total Army Reserve mobilized. <sup>150</sup> Then Army Reserve G-3, Colonel Les Carroll, pointed out that cross-leveling may still be necessary to fill high demand MOS skills and to give operational depth to specialty units. <sup>151</sup>

In 2007 Army Chief of Staff General George W. Casey, Jr., with the support of Secretary of Defense Robert Gates, initiated a set of priorities for transformation of the Total Force. The Army Reserve was directed to adopt the generating force and adapt statutes, policies and process in support of transformation to an operational force. The transformation of the Army Reserve to an operational force was projected to be complete by 2012. The new model for the use of the Army Reserve would be to train, alert, then deploy. This would mean new importance for unit readiness and collective training. In October 2008 Secretary of Defense Robert Gates issued *Department of Defense Directive 1200.17*, *Managing the Reserve Components as an Operational Force* that recognized the future role of the Reserve Components will be that of providing operational capabilities in strategic depth to the AC in a predictable manner. Is It also directed

<sup>&</sup>lt;sup>149</sup>Ibid., 327.

<sup>&</sup>lt;sup>150</sup>Ibid., 343.

<sup>&</sup>lt;sup>151</sup>Ibid., 343.

<sup>&</sup>lt;sup>152</sup>Ibid., 330.

<sup>&</sup>lt;sup>153</sup>Ibid.

adequate resources to meet readiness requirements across the reserve components. The Army Reserve was to provide operational capabilities in accordance to the published national defense strategy, force management, and requirements. The *Department of Defense Directive 1200.17* directed that the Army Reserve take action to ensure unit integrity and operational readiness. <sup>154</sup> A month later, in November 2007, Secretary of Defense Gates released a memorandum, *Utilization of the Total Force*, recognizing the historically evolved systemic problems in Army Reserve business practices. Secretary of Defense Gates further directed the Army Reserve to obtain <sup>155</sup> readiness levels as soon as it could be achieved but no later than 2015. <sup>156</sup> The memorandum also limited mobilization of Army Reservists to 12 months inclusive of pre- and post-mobilization activities. <sup>157</sup>

In 2006 the Army Reserve had begun the process of restructuring the force to reflect the modularity concept centered on the brigade combat team. The belief in 2008 was that modularity would help eliminate the need to reassign cross-levels and the associated negative impacts on unit cohesion in USAR units for deployment. <sup>158</sup>

With the restructuring in 2006 the Army Reserve also adopted the time phased readiness model ARFORGEN. Army Reserve units would be rotated though three phases

<sup>&</sup>lt;sup>154</sup>Ibid., 331.

<sup>&</sup>lt;sup>155</sup>It is worded as "restore . . . to highest levels as soon as possible." But historically, as shown in the preceding text, the levels were historically highest before Desert Shield/Storm at 83 percent mission capable.

<sup>&</sup>lt;sup>156</sup>Coker, The Indispensable Force, 332.

<sup>&</sup>lt;sup>157</sup>Ibid., 378.

<sup>&</sup>lt;sup>158</sup>Ibid., 334.

of readiness and capability. The ARFORGEN phases are Reset, Train/Ready (T/R), and Available. Available force pool units are required the highest readiness levels of all the phases. Before transition into the Ready pool, Reserve units and Soldiers would be validated at individual and collective training events. <sup>159</sup> By 2012 the Army Reserve was operating on a one year Reset, three years T/R, and Available for utilization for one year, at surge rotation levels, or 1:4. 160 The time that units spend mobilized and in dwell is referred to as the operational readiness cycle and applies to rotational ARFORGEN units. The operational readiness cycle is commonly referred to as the deployment-to-dwell ratio. The deployment-to-dwell ratio will change based on the demand spectrum of steady state, surge, or full surge. The Army Reserve in 2014 is operating at surge rotation levels. This indicates that the demand for forces exceeds the forces in the Available Force Pool. Additionally, units are categorized into force packages as either Deployment Expeditionary Force (DEF) or Contingency Expeditionary Force (CEF). Army Reserve contains both DEF and CEF units that are categorized as either Operating Force or Generating Forces. DEF units are units that are assigned to an operational mission. CEF units are units that are available for use during their available year. Depending on the ARFORGEN pool, DEF and CEF units are either available for mission or useable as surge forces. In 2012, the Army Reserve had 120,000 Solders in ARFORGEN rotation, 25,000 Soldiers in Operational and Functional Commands of non-rotational and always

<sup>&</sup>lt;sup>159</sup>Ibid., 373.

<sup>&</sup>lt;sup>160</sup>The RC Steady State deployment to dwell ratio is 1:5, The RC Surge deployment to dwell ratio 1:4, and the RC Full Surge has no dwell ratio. AR 525-29 is under revision. The U.S. Army Command and General Staff College, F100, 11.

available forces, 48,000 in Generating Forces, and 12,000 in IMA and TTHS. <sup>161</sup> The *U.S. Army Reserve Vision and Strategy Statement 2020* stated that the adoption of the ARFORGEN model would allow "leaders to identify a predictable deployment window" and "manage readiness and training focus accordingly." <sup>162</sup>

Army Reserve manning activities did not maintain the Army Reserve Strength authorization for TPU, AGR, and IMA <sup>163</sup> from roughly 1990 to 2000. From 2001 to 2009, the Army Reserve was operating in an under strength status with respect to enlisted personnel. From 2002 to 2010, overall Army Reserve retention goals were met, but there were still shortages in officers and senior and mid-grade Non-Commissioned Officers. Additionally the Army Reserve was operating below the authorized strength and only exceeded it in 2010 to 2011. <sup>164</sup> To attract and retain high-demand MOS Soldiers, the Army Reserve began several incentive programs to reward and obligate service members. <sup>165</sup>

Unit FTS staff DoD-wide averaged 21 percent in 2005. The Army Reserve during the same period had only 11 percent of the total selected reserve as FTS. As of 2010

<sup>&</sup>lt;sup>161</sup>U.S. Army Command and General Staff College, F100, 11.

<sup>&</sup>lt;sup>162</sup>Ibid.

<sup>&</sup>lt;sup>163</sup>TPU, AGR, and IMA Soldiers are the selected Reserve force and do not include IRR, standby and Retired Reserve. Current Authorization is 205,000 postions. The *2014 QDR* stated that the future Select Reserve force size will be 195,000.

<sup>&</sup>lt;sup>164</sup>Lawrence Kapp, *Recruiting and Retention: An Overview of FY2011 and FY2012 Results for Active and Reserve Component Enlisted Personnel* (Washington, DC: Congressional Research Service, 2013), 8.

<sup>&</sup>lt;sup>165</sup>Coker, The Indispensable Force, 349.

roughly 7 percent was AGR. <sup>166</sup> In 2010, FTS support structure was viewed by the then Chief of the Army Reserve, LTG Jack C. Stultz, as part of the legacy strategic reserve construct. <sup>167</sup>

The recently published 2014 Quadrennial Defense Review addresses the need to rebalance the joint forces while considering the risks associated with future DoD budget cuts. The 2014 Quadrennial Defense Review recommends the Army Ready Reserve pool strength be reduced from 208,000 to 195,000. The 2014 Quadrennial Defense Review also requires the Army Reserve of the future to preserve, restore, and maintain readiness levels and warns that further budget cuts will affect the ability to do so. Additionally, the Army Reserve is directed to "seek and recruit personnel with critical skill sets, retain highly experienced personnel, and maintain complementary (and critical) capabilities with the Active Component." Additionally the Army Reserve must be capable to provide trained units and personnel to augment the Active Component. Fiscal restraint also requires seeking efficiencies in personnel management that delivers commanders the readiness they require. The 2014 Quadrennial Defense Review also recommends

<sup>&</sup>lt;sup>166</sup>Ibid., 346.

<sup>&</sup>lt;sup>167</sup>Ibid., 349.

<sup>&</sup>lt;sup>168</sup>Future sequestration may require an additional 10,000 authorizations cut from Army Ready Reserve forces.

<sup>&</sup>lt;sup>169</sup>Department of Defense, *Quadrennial Defense Review* (Washington, DC: Department of Defense, March 2014), 31.

<sup>&</sup>lt;sup>170</sup>Ibid.

<sup>&</sup>lt;sup>171</sup>Ibid., 47.

reviewing the reserve's ability to mobilize for a national emergency and the overall preparedness levels.

The period from September 11, 2001, to today has seen Army Reserve Soldiers mobilized in support of the Joint Forces around the globe. The 2001 Quadrennial Defense Review began to address some of the lingering readiness issues within the Army Reserve. The importance of mobilizing Army Reserve forces as early as possible and the associated difficulties associated in mobilization were some of the issues addressed. Outdated manning management processes continued to plague the mobilization process. Initiation of the use of the TTHS account and the Army Reserve Expeditionary Force sought to improve overall readiness metrics and force generation of the Army Reserve. The 2005 Quadrennial Defense Review directly affected manning, training, and education within the Army Reserve. The Army Reserve would now be an operational force, available and ready to deploy, no longer used as a strategic reserve. ARFORGEN was also adopted, but units were being used faster than they could be generated, requiring reassignment of cross-levels of into mobilized units. The Army Reserve adopted the train, alert, and then deploy philosophy of the Total Army. This heightened the importance for Army Reserve unit readiness, collective training and evaluation, and adequate resources. Army Reserve unit integrity and operational readiness became increasingly intertwined as more units mobilized. The Army Reserve is still using historically evolved and problematic business practices to manage mobilization. Modularity and time-phased readiness in ARFORGEN, adopted by the Army Reserve, would help eliminate the need to reassign cross-levels to fill vacancies. ARFORGEN also defines the Total Force into an Operational Force (Rotational and non-Rotational units)

and Generating Forces (command committed, operationally available, and strategic assets). <sup>172</sup> During the GWOT, the Army Reserve readiness was affected by low manning strength in its TPU and FTS. The *2014 Quadrennial Defense Review* seeks to rebalance the joint forces and clarify the future mission of the Army Reserve. The future Army Reserve will preserve, restore, and maintain readiness levels and continue to be capable of providing trained units and personnel to augment the Active Component.

The reduction in the United States' combat involvement in Iraq and Afghanistan and recent budget pressures have resulted in discussions to reduce the size of the Army Total Force. As a key component to the Army Total Force, the USAR provides complementary capabilities to the Active Components. The USAR's authorization of 205,000 Soldiers provides capabilities in engineering, civil affairs, medical, transportation, logistics, law enforcement, telecommunications, information technology, finance, legal services, human resources, replacement units, psychological operations, sustainment, mortuary affairs, and training. In addition, the USAR provides capabilities that are unique to the USAR and not found in the AC or NG. These include, but are not limited to, biological detection, railway units, and replacement companies. As of March 2012, 19,156 USAR Soldiers were mobilized in support of operations around the globe. <sup>173</sup> In the foreseeable future the USAR will still be needed to provide complementary and unique capabilities as the Active Army down sizes. Budget pressure, as in the past, is defining the size and policies for the use of the USAR.

<sup>&</sup>lt;sup>172</sup>Headquarters, Department of the Army, Army Regulation 220-1, 29.

<sup>&</sup>lt;sup>173</sup>Stultz, The United States Army Reserve 2012 Posture Statement, 7.

The review of the history of readiness in the USAR has shown relevancy to the analysis of the feasibility of maintaining DMOSQ at 85 percent or higher. The next step in the investigation is to review the systems, policies, and procedures used to manage DMOSQ readiness in the USAR today. The review of the systems, policies, and procedures provides an understanding into the way DMOSQ is calculated to support readiness in the USAR.

#### **CHAPTER 4**

#### THE PROBLEM

The next step in the investigation of DMOSQ in the USAR, after reviewing the history, is to review the systems; policies; and procedures used in calculating DMOSQ in support of readiness in the USAR. An analysis of the systems, policies, and procedures provides an understanding into the way DMOSQ is calculated and how the results are used to support readiness in the USAR. What follows is an analysis of the systems and the linkages, some data management problems that were uncovered in investigating the systems, and a simplified calculation show the differences between the 85 percent policy, ARFORGEN DMOSQ, and authorizing 125 percent fill in the ranks of Private through Specialist.

A simplified diagram showing the linkage between the data bases and programs used by the USAR to manage DMOSQ strength is shown in figure 1. Data input is on the left of the diagram and outputs are on the right. Discussed below are the systems and programs followed by a description of problems associated with each system discovered during researching USAR readiness. The data bases and computer accessible programs consist of the Army Training Requirements and Resources System (ATRRS), Regional Level Application Software (RLAS), the Total Army Personnel Data Base-Reserve (TAPDB-R), the Defense Readiness Reporting System-Army (DRRS-A), and the associated Net-Centric Unit Status Reporting (NetUSR) system, Individual Training and Readiness System, and Active Guard Reserve Information Management System. Not shown in figure 1 but related to DMOSQ are the Active Guard Reserve Management Information System (AGRMIS), the Force Management System website, and the web-

based Digital Training Management System (DTMS). The databases and programs are of varying ages, program languages, platforms, and managed by different developers.

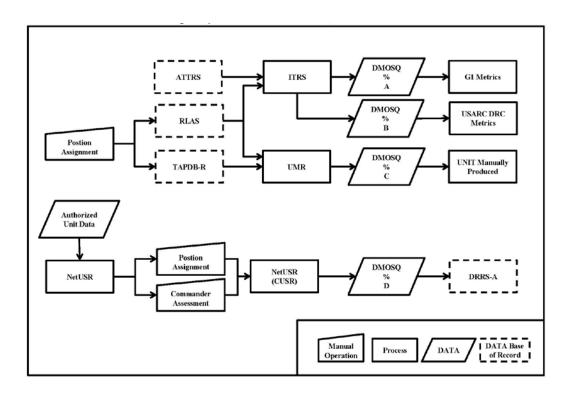


Figure 1. Differing ways to obtain DMOSQ percents in USAR *Source*: Created by author.

The Army Training Requirements and Resources System is the Department of the Army's system of record data base for recording Soldier training. The online interface allows Soldiers and units to access student training information as well as providing an automation support tool that establishes Army training requirements, determines training programs; manages class schedules, quotas, and reservations; and records student attendance. ATRRS was designed to support the Training Requirements Division of the Office of the Army G-1's mission to integrate all phases of training management within

the ARFORGEN process. ATRRS supports planning, programming, budgeting, and execution phases of the training process and is utilized by Soldiers and units to match available training with requirements of the Soldier. <sup>174</sup> Access to ATRRS data is controlled by permissions that limit what a user can see or change. With the correct permissions, the ATRRS interface can provide data and statistics of Army training effectiveness. ATRRS is the source of record for Soldiers' Military Occupation Skill Qualification when accessing unit DMOSQ data in the ITRS.

The Army Standard Installation Division Personnel System III was in use from 1982 until 1994 when it was replaced by RLAS. RLAS is a Soldier resource management tool for duty orders, training, drill reporting, pay, and administrative data and is linked to the Defense Enrollment Eligibility Reporting System that establishes Soldier and family benefit eligibility. RLAS was deemed to be obsolete and scheduled for replacement in 2009 by the Defense Integrated Military Human Resources System. In February 2010, after problems with the Defense Integrated Military Human Resources System's development, Secretary of Defense Robert Gates and Chairman of the Joint Chiefs of Staff Michael Mullen announced the cancellation of the Defense Integrated Military Human Resources System. The Defense Integrated Military Human Resources System.

<sup>&</sup>lt;sup>174</sup>U.S. Army, "About ATRRS," Army Training Requirements and Resource System web site, https://www.atrrs.army.mil/information.aspx (accessed February 11, 2014).

<sup>&</sup>lt;sup>175</sup>Tom Philpott, "Mullen Pulls Plug on Problem-Plagued DIMHRS Pay Program," *Newport News Daily Press*, February 22, 2010, http://articles.dailypress.com/2010-02-21/news/dp local\_milupdate\_0222feb22\_1\_military-personnel-payroll-navy-and-air-force (accessed March 22, 2014).

utilized to access pay and orders, edit the UMR, and the primary unit interface to update TAPDB-R.

The TAPDB-R is the human resources system data base of record for Soldier names, social security numbers, and addresses. It includes other information limited to promotion orders, assignments, training, deployment, blood type, and HIV screening dates. It is within the TAPDB-R system that the linkage between the Soldier and the Unit Identifier Code is made that assigns the Soldier to the unit and allows him to be placed within a duty position. Movement of Soldiers from one unit to another is performed by echelons higher than battalion unit level. Along with ATRRS, TAPDB-R is also accessed by the ITRS to provide individual Soldier Human Resource information when accessing unit DMOSQ data in the ITRS.

The ITRS is the USARC database of record for DMOSQ. The ITRS was developed in 1997, originally called the Individual Training Requirements and Resources Geographic Information System, and was issued to Regional Support Commands only. As there was only one system per Regional Support Command, the input and use of the data was difficult. In the beginning of 2000, access to the unit level users was granted from within the USARC Intranet. Access was made available through a web-based application called ITRS for the Web. Due to access problems for users at the unit level, ITRS for the Web was made available to all authorized users via the Internet using Army Knowledge On-line and later Common Access Card (CAC) authentication. In late 2013 an attempt to field a new version of the ITRS web-based interface was delayed due to access problems requiring ITRS administrators to revert to the older version. The newer version planned to allow users access to historical ITRS data that is currently unavailable

in the older version. ITRS accesses several data-bases of record and provides formatted reports at various command levels. ITRS also provides the ability to perform ad hoc reporting using simplified data-base queries built into the web-based application. ITRS extracts information and updates the ITRS data base from TAPDB-R, ATRRS, and RLAS weekly. The ITRS also extracts weekly from the USAR Force file containing USAR unit information, monthly from the Fiscal Year to Date database and the Gains/Losses file containing USARC attrition data, and every other week from the Recruit Quota System file that contains unit vacancies used to enlist or transfer Soldiers to Reserve units. The ITRS uses the information from TAPDB-R and ATRRS to determine DMOSQ in accordance with CUSR reporting rules as outlined in Army Regulation (AR) 220-1. The ITRS is a read from source only data-base. Errors in the ITRS data can only be corrected in the underlying record data-bases. <sup>176</sup> The ITRS does allow units to enter remarks that allow commanders to explain errors or discrepancies in the data. <sup>177</sup>

The DRRS-A is the Secretary of Defense's Army unit readiness reporting system. DRRS-A is a data-base intended to provide a capabilities-based, near-real-time reporting system for the Army. Lockheed Martin is the DoD contractor currently developing and maintaining the DRRS-A and associated interface software. DRRS-A supports the ARFORGEN process by providing a system to report progressive unit readiness. <sup>178</sup> Unit

<sup>&</sup>lt;sup>176</sup>U.S. Army Reserve ITRS Support Team, *Individual Training and Readiness System Users Manual*, October 2006, https://itrs.usar.army.mil/ (accessed April 8, 2014), Section 2-2.

<sup>&</sup>lt;sup>177</sup>Ibid., Section 2-3.

<sup>&</sup>lt;sup>178</sup>Headquarters, Department of the Army, Army Regulation 220-1, 4.

ARFORGEN data is reported using NetUSR and is used by senior leaders to help determine where to apply army readiness resources. <sup>179</sup> In DRRS-A, unit commanders report and assess their ability to perform their war-time mission through the Commanders Unit Status Report by using the web-based NetUSR program. CUSR provides the Joint Staff and Office of the Secretary of Defense with specific readiness information and the Headquarters, Department of the Army with unique readiness requirements and is used to accurately assess operational readiness. <sup>180</sup> The CUSR consists of personnel, equipment, collective training, and unit commander assessments. In the personnel section of the NetUSR program, the unit's P-Level is measured using available strength percentage, the available DMOSO strength, and the available senior grade in accordance with AR 220-1 Table 9-1. 181 USAR units submit regular CUSR reports in NetUSR on a quarterly basis and validation reporting all other months. There is currently no automated interface between the RLAS UMR and the personnel section of the CUSR in NetUSR. Currently, the NetUSR program provides commanders a module to provide a ranked and ordered list of MOSQ shortages during the report period. 182 Additionally, the NetUSR supports the ARFORGEN process and generates personnel readiness ratings based on DMOSQ percent fill. The P-Level is used to determine if the unit is meeting the metrics required for the ARFORGEN pool. Unit MTOE/TDA personnel required strength is the baseline for all P-Level metrics. The assigned strength is all Soldiers officially assigned to the

<sup>&</sup>lt;sup>179</sup>Ibid., 30.

<sup>&</sup>lt;sup>180</sup>Ibid., 53.

<sup>&</sup>lt;sup>181</sup>Ibid., 44.

<sup>&</sup>lt;sup>182</sup>Ibid.

unit. Available strength is the portion of the assigned Soldiers that can be employed and deployed. <sup>183</sup> Available MOSQ are Soldiers that are available and who possess the skill and training against the position slotted on the UMR. <sup>184</sup> The P-Level is based on the lowest of the available strength percent, available MOSQ strength percent, and available Senior Grade percent against a chart of P-Levels. MOSQ strength is determined by the assigned MOS skills matched. For MOSQ, P1 is 100 to 85 percent MOSQ matched, P2 is 84 to 75 percent matched, P3 is 74 to 65 percent matched, and P4 is 64 percent or less matched. <sup>185</sup>

The Active Guard Reserve Information Management System is the system that Army Human Resources Command uses to manage required and authorized Full Time Support (FTS) AGR positions within current MTOE or Table of Distribution and Allowances (TDA) for USAR units. Within the USAR, there are more required AGR FTS positions than there are authorized. Due to authorizations, required but not authorized positions are approved for fill with Troop Program Unit (TPU) Soldiers. If a position is required and authorized by the Human Resource Command, the position is filled by Human Resource Command carrier managers with a DMOSQ AGR Soldier and blocked to fill by Troop Program Unit (TPU) Soldiers. There is no automated interface between the Active Guard Reserve Information Management System and the unit UMR.

 $<sup>^{183}\</sup>mbox{Headquarters},$  Department of the Army, Army Regulation 220-1, 42.

<sup>&</sup>lt;sup>184</sup>Ibid., 43.

<sup>&</sup>lt;sup>185</sup>Ibid., Table 9-1.

The Force Management System website <sup>186</sup> is the primary source for Army authorization documents for unit personnel. The site contains the current and effective MTOE or TDA for all Army units. In the MTOE/TDA document, the unit manning structure containing the required duty MOSQ and rank of unit members is specified. The United States Army Force Management Support Agency documents unit manpower requirements and authorizations for the Army. To find units' personnel authorizations and requirements, the Force Management System website can be searched based on Unit Identification Code, Unit Name, or unit functional type.

The DTMS is a web-based unit and individual training management tool that interfaces with the Army's Unit Training Management System. DTMS sources Soldier data from the Medical Protection System, ATRRS, and the Integrated Total Army Program to track relevant unit Mission Essential Task List and individual training for units at brigade and below. The unit DTMS homepage is populated with personnel information from TAPDB-R. DTMS allows the operator to attach, detach, and exclude personnel from the unit's available strength. DTMS can provide individual training information from the entire service record of an individual.

While investigating the previously described data-bases and systems that are used in the USAR to manage manning of Soldiers the determination was made that there are

<sup>&</sup>lt;sup>186</sup>U.S. Army Force Management Support Agency (USAFMSA), Force Management System website, https://fmsweb.army.mil/unprotected/splash/ (accessed April 8, 2014).

<sup>&</sup>lt;sup>187</sup>Army Training Network, "DTMS Knowledge Base," https://atn.army.mil/dsp\_template.aspx?dpID=240 (accessed April 8, 2014).

<sup>188</sup>Ibid

some issues with the accuracy and usefulness of the data. Some of the daily processes to manage unit manning require human data operations that cause vulnerabilities in the accuracy of DMOSQ reporting.

Members of the USAR FTS are responsible for manually moving the Soldiers into valid positions on the UMR. The Soldier must be assigned to the Unit Identifier Code within RLAS before he can be placed into a position. The first time the Soldier shows up in the RLAS system, he or she will be in the Awaiting Assignment (9992) pool and will need to be manually moved into a position on the UMR. The maximum days a Soldier can sit in the 9992 pool is 30 days (see table 1). When a DMOSQ Soldier is in the 9992 pool he or she is not contributing to positive DMOSQ readiness.

Table 1. Special Category Codes

Code	DEFINITION
9990	Reassignable Overstrength (max 365 days)
9991	Simultaneous Membership Program (SMP)
9992	Awaiting Assignment (max 30 days)
9993	Projected losses (max 180 days)
9997	Trainee, Transient, Holdee and Student (TTHS) Account
9999	AGR

*Source*: U.S. Army Reserve ITRS Support Team, "Individual Training and Readiness System Brigade/Battalion Best Practices," January 2013, https://itrs.usar.army.mil/(accessed April 8, 2014).

Active Guard Reserve Soldiers are given their own category code of 9999 and are normally not moveable into positions in RLAS on the UMR. An automated position block in RLAS further complicates manual UMR maintenance when the blocks are on the wrong positions. The RLAS operator can assign a TPU to an AGR position if the position is not correctly blocked. This can lead to a skewed DMOSQ readiness metric in the ITRS when qualified Soldiers are not in the correct positions on the UMR.

Commanders and FTS are subject to pressure to have the best readiness metrics within a given command. There are no checks and balances within manual processes in RLAS or ITRS to ensure the accuracy of the UMR. The UMR management within the RLAS system can be manipulated to skew DMOSQ reports within ITRS. <sup>190</sup> Correcting and validating the UMR shell is a company level process. It requires a comparison between the current MTOE/TDA documents retrieved from Force Management System website and the unit AGRMIS report. If the systems are not manually reconciled the DMOSQ data produced will be inaccurate.

There are no safeguards in the RLAS system keeping the operator from knowingly putting a TPU Soldier into an AGR authorized position or double, triple or quadruple stacking Soldiers into TPU positions on the UMR. Manipulating the assignment locations on the UMR is also easily done at the unit level without publishing

<sup>&</sup>lt;sup>189</sup>Author witnessed UMR manager placing an AGR in a TPU position and a TPU in an AGR postion on a UMR to compensate for AGRMIS notation errors. The UMR manager fixed the readiness problem caused by the UMR AGRMIS mismatch using a work around but was not correcting the data in AGRMIS.

<sup>&</sup>lt;sup>190</sup>Capt. Gail A. Fisher and Col. Gary C. Howard, "Apples and Oranges: The Unit Status Report And Readiness in the Army Reserve," *Army Magazine* (January 2006): 16-18.

the required assignment order for the Soldier. The flexibility of the RLAS system allows for special assignment situations. RLAS can be used to hide unqualified Soldiers in the UMR. This manual operation in the RLAS UMR module affects DMOSQ reporting when extracted by the ITRS. The ITRS, for instance, will automatically place a double-stacked Soldier into a DMOSQ vacancy match in a unit, but RLAS and NetUSR will not. <sup>191</sup> The result is that there is an invisible pool of Soldiers, normally not available to other units, which are automatically cross-filled within the ITRS system from other UMRs. This means the ITRS produces an inaccurate DMOSQ readiness metric.

Another manual operation that requires UA action to improve DMOSQ readiness reporting comes from Soldiers who have recently attended an MOS producing course. The Soldier is not immediately awarded the MOS in ATRRS at the completion of the course. Instead, the unit must submit paperwork through the USAR channels to award the MOS in ATRRS. The wait time required to process the manual action delays the otherwise positive improvement to DMOSQ readiness reporting.

Another manual operation that has an effect on DMOSQ readiness is the management of AGR Soldiers. The Active Guard Reserve Information Management System is used to authorize USAR AGR positions. AGR positions on the UMR are manually blocked to Troop Program Unit (TPU) Soldier assignment by notes entered by the Regional Support Commands. Within AGRMIS there are currently more required AGR positions than are authorized. Only a unit position that is required and authorized

<sup>&</sup>lt;sup>191</sup>Notes contained within ITRS report 57 and clarified in U.S. Army Reserve ITRS Support Team, *Individual Training and Readiness System Users Manual*, 7-212.

<sup>&</sup>lt;sup>192</sup>Howard, "The 85 Percent Solution," 11-12.

should be blocked to TPU fill on the Unit Manning Report (UMR). Unit Administrators (UA) are not limited to only assigning TPU Soldiers into non-AGR positions and AGRs into AGR positions. The only mechanism to block AGR positions is the wording in the notes column of the UMR in RLAS. If the Regional Support Command notes a position for AGR fill, due to misunderstanding the required and authorized rules established in AGRIMIS, it will lead to a vacant position on the UMR. When a position in AGRIMIS is required but not authorized, the position will not be filled with an AGR Soldier by assignment managers at Human Resource Command. These errors in managing the UMR lead to unit vacancies that affect the overall unit DMOSQ fill rate.

Personnel manning errors in the UMR document, identified in NetUSR, must be manually corrected. The UMR is considered the authoritative document for unit manning information. Personnel manning errors in the UMR document, identified in NetUSR, must be manually corrected. There is no automated linkage between the UMR in RLAS and NetUSR. The FTS must manually transfer the personnel information from the UMR into the NetUSR. NetUSR requires validation before the report is submitted as a safeguard to minimize operator mistakes. Even with the validation process, the system is not fool proof and will allow the operator to switch two qualified individuals with each other and manually check the DMOSQ qualified box, and the system does not discern among AGR positions. Any mistakes or omissions during manually entering data into NetUSR will lead to DMOSQ readiness inaccuracies.

The USAR and United States Army's often conflicting and evolving business rules and policies have made DMOSQ management less timely than required by the Operational Force. The Strategic USAR historically required time to interpret and

implement AC business practices. The Total Force policies should apply to all components, but component-specific guidance is still being made.

One business rule that has an effect on determining the feasibility of maintaining 85 percent DMOSQ was the recently published AC manning guidance. Effective 2nd Quarter 2013, HQDA Fiscal Year (FY) 13–15 Active Component (AC) Manning Guidance (MG) (ACMG), manning targets in the AC would be linked to P-Levels, but no mention is made of the RC. 193 DMOSQ percents are part of determining the P-Level as units move through the ARFOGEN process. As the unit progresses through the ARFORGEN process, the required P-Level rating can help commanders determine the required DMOSQ manning levels. Headquarters, Department of the Army establishes ARFORGEN aim points in the ARFORGEN Synchronization Order (ASO). 194 A unit commander's subjective assessment of his DMOSQ has no bearing on the CUSR P-Level. 195 Only Army Reserve rotational units follow the ARFORGEN model. Aim points, milestones for each ARFORGEN pool, are difficult to apply to non-rotational units. 196 The Reset pool, aim point 1, requires a P-Level of three (74 to 65 percent DMOSQ fill) for CEF and DEF units. Aim points two through four reflect the T/R-1 through T/R-3 and require a P-Level of two (84 to 75 percent DMOSQ fill) for CEF

<sup>&</sup>lt;sup>193</sup>U.S. Army, "Improving the Duty Military Occupational Specialty Qualification (DMOSQ) metric within the Unit Status Report (USR)" (DAP-MP Information paper to Director DAMO-OD Paper, December 7, 2012), https://itrs.usar.army.mil/[information/DRRS-A/Policy/USR P-Level Tasking Memo ENCLS 1-5.pdf (accessed April 8, 2014).

<sup>&</sup>lt;sup>194</sup>Headquarters, Department of the Army, Army Regulation 525-29, 4.

<sup>&</sup>lt;sup>195</sup>Headquarters, Department of the Army, Army Regulation 220-1, paragraph 9-2 d(6), e(2).

<sup>&</sup>lt;sup>196</sup>Non CEF or DEF.

units. DEF units are assigned against a mission and will meet the manning requirements for the mission in T/R-3 through available. <sup>197</sup> CEF units normally maintain a P-Level of two (84 to 75 percent DMOSQ fill) during their available year in anticipation of mobilization. Unlike the 85 percent DMOSQ rule ARFORGEN does not apply equally to all USAR units. This compounds the difficulty in analyzing the feasibility of maintaining 85 percent DMOSQ and ARFORGEN in parallel.

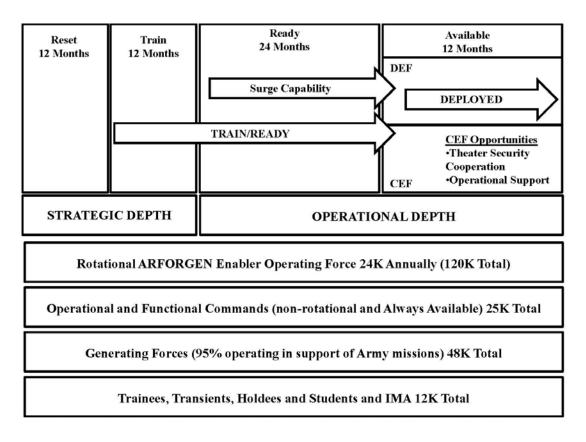


Figure 2. Strategic and Operational Depth of USAR

*Source*: U.S. Army Command and General Staff College, F100, *Managing Army Change: Army Force Generation Reading F106RA* (Fort Leavenworth, KS: US Army Command and General Staff College, June 2013).

<sup>&</sup>lt;sup>197</sup>Usually 110 percent DMOSQ fill to account for mobilization losses.

Another set of business practices that affect DMOSO reporting involves correcting for the deficiency of DMOSQ Soldiers in a deploying unit. A short description of the process highlights the second- and third-order effects of this business practice. Personnel shortages, identified in deploying USAR, are filled by USAR personnel managers utilizing volunteers, moving personnel within the unit on the UMR, and reassigning cross-levels from non-deployable units. 198 Reassignment of cross-levels can happen in several ways. <sup>199</sup> Cross-levels can move from non-alerted units and between non-alerted to alerted units. An involuntary transfer between two non-alerted units must be consistent with AR 135-91, paragraph 5-4 a (1) and AR 140-10, paragraph 1-10, and Para 2-7c. These regulations require the unit to afford an involuntarily reassigned Soldier the means to attend training 200 within reasonable commuting distance from the Soldier's residence. The requirement to allow the Soldier to conduct training close to home is not applicable when costs for transportation, quarters, and meals are provided for the TPU Soldier. AR 135-91 limits TPU assignments within the USAR to those within 50 miles or a 90-minute drive time from the Soldier's home town. This geographical limitation reduces the ability of the USAR to fill vacancies with qualified individuals.<sup>201</sup>

<sup>&</sup>lt;sup>198</sup>U.S. Department of Defense (DoD), Department of Defense Instruction 1235.12, *Accessing the Reserve Components (RC)*, February 4, 2012 with change 1, April 4, 2012.

<sup>&</sup>lt;sup>199</sup>Headquarters Department of the Army, *Department of the Army Personnel Policy Guidance for Overseas Contingency Operations* (Washington, DC: HQDA G-1, Military Mobilization Branch, July 1, 2009, with August 9, 2013, update).

<sup>&</sup>lt;sup>200</sup>In an Inactive Duty Training (IDT) status.

<sup>&</sup>lt;sup>201</sup>Fisher and Howard, "Apples and Oranges," 16-18.

Another effect the business rules of cross-leveling has on unit DMOSQ readiness is during CUSR reporting. Only the USARC Commanding General has the authority to reassign cross-levels between non-alerted to alerted units regardless of whether the Soldier transfer is voluntary or involuntary. The one condition of reassignment of cross-levels is that the loosing unit cannot go below readiness levels as outlined in AR 220-1, chapter 4. 202 The mobilization of individuals degrades the donor unit's readiness P-Level metric. If the parent unit's P-Level drops below P-3 on the CUSR, the commander is required to make comments on the effects reassignment of Soldiers as cross-fills is having on his unit. During CUSR, unit commanders are instructed to refrain from cross-leveling within their formation to improve readiness rankings. 203 As stated earlier, the ITRS system will move excess DMOSQ Soldiers into an available position on a UMR. This conflict makes analyzing the data between the DMOSQ numbers reported in DRRS-A and the ITRS more problematic.

Another business rule that makes the analysis of DMOSQ readiness problematic is high priority USAR unit sourcing. Reserve DEF units receive high priority for fill when sourced to support a Theater or Combatant Command operation. REF units are typically identified as the source for cross-fills for DEF units. Special provisions in AR 220-1<sup>204</sup> address mobilization or deployment of individual Soldiers. With Secretary of

<sup>&</sup>lt;sup>202</sup>Headquarters, Department of the Army, Army Regulation 220-1, *Army Unit Status Reporting and Force Registration-Consolidated Policies*, Chapter 4 "Basic Concepts and Business Rules" does not contain readiness levels that would allow this to be determined.

<sup>&</sup>lt;sup>203</sup>Headquarters, Department of the Army, Army Regulation 220-1, para 9-2(a).

<sup>&</sup>lt;sup>204</sup>Ibid., 8-6 b. Unit fragmentation.

Defense approval, units can mobilize with 110 percent strength to ensure 100 percent to account for losses during the mobilization process. The 10 percent increase in DMOSQ requirements for mobilizing units further degrades the readiness of donor units. Since the effect of high priority sourcing is unclear the analysis of the overall DMOSQ percent of the USAR from the 85 percent policy is difficult to ascertain.

Another business rule of the USAR that affects DMOSQ involves obtaining Soldiers to fill vacancies in units. Reserve units can receive cross-levels from the AC that are referred to as Passbacks. Manning levels for a specific Duty Military Occupational Specialty in the USAR will not exceed that of the AC. The level of fill for the USAR for a specific MOS will not exceed the AC when utilizing Passbacks. Since the level of a specific MOS, held in the AC but not in the USAR, is not delineated in the rule study of DMOSQ in the USAR it is difficult to assess. The actual numbers of Soldiers that the AC will provide to the USAR that could be counted within the 85 percent is unknown.

Another set of business rules that involve increasing shortages of DMOSQ Soldiers and has similar second- and third-order effects as cross-leveling is the use of the IRR. The IRR is also another source for filling vacancies within mobilizing USAR units. The IRR pool primarily contains individuals that have a Military Service Obligation from their service in either the Active Army or Select Reserve. The Military Service Obligation can be from a service contract or from volunteering to remain in the IRR pool. Title 10 United States Code legalizes the authority over involuntary activating IRR

<sup>&</sup>lt;sup>205</sup>Headquarters, Department of the Army, *Department of the Army Personnel Policy Guidance for Overseas Contingency Operations*, 30.

Soldiers from IRR to active duty. <sup>206</sup> The IRR pool can have huge effects on analyzing the DMOSQ readiness of USAR units as the pool can contribute positively to overall USAR readiness if there was a system to automatically assign DMOSQ IRR Soldiers into TPU vacancies. Since there is not there is no way to determine the effect that IRR Soldiers would have toward positive DMOSQ in the USAR.

Another business rule and policy, previously discussed as a manual operation, that affects the analysis of DMOSQ involves assigning several Soldiers to one duty position. Double slotting is the practice of assigning a duty position on the UMR to two individuals assigned to the unit. Over-strength Soldiers in the USAR are normally placed in the Reassignable Over strength category (9990) in RLAS. Current CUSR regulations state that "available MOSQ strength cannot exceed available strength" and "personnel who are over strength in a specific skill will not be counted as MOSQ." However, the fiscal year 2013 Troop Program Unit Manning Guidance implemented a strategy that will cause USAR units to be over manned. To meet USAR end strength goals the 2013 Troop Program Unit Manning Guidance directed commanders to "set aside the 'one Soldier-one position' manning policies of the past and to expect to gain up to 125 percent of TPU strength." This policy inflates the authorized manning of USAR Private thru Specialist that make an invisible cross-fill pool that the ITRS will report as filling

<sup>&</sup>lt;sup>206</sup>Ibid., 30.

<sup>&</sup>lt;sup>207</sup>Headquarters, Department of the Army, Army Regulation 220-1, 33.

<sup>&</sup>lt;sup>208</sup>Ibid., 34.

<sup>&</sup>lt;sup>209</sup>U.S. Army, Office of the Chief Army Reserve, *FY13 Troop Program Unit Manning Guidance* (Washington, DC: Office Chief Army Reserve DAAR-HR, 2013).

vacancies in other units. This additionally makes the ITRS data corrupt and unusable for this study.

An accountability business rule that has an effect on calculating DMOSQ is the use of the TTHS account. Part of the non-deployable population is the TTHS Soldiers. The TTHS are often newly assessed Soldiers or transfers from AC that require MOSQ training to qualify for assignment into a duty position in the unit. There are currently zero Soldiers assigned to the TTHS (9997) account <sup>210</sup> within the USAR. Any Soldier assigned to the 9997 account will not count against the unit assigned strength when calculating DMOSQ. Soldiers assigned to the unit that are not deployable are included in the assigned strength by NetUSR when calculating the CUSR P-Level. 211 Just over 25 percent of USAR unit assigned strength are attending or enrolled in a MOS-awarding school at any one time. <sup>212</sup> The initial population size of TTHS was set at a maximum of 4000 Soldiers or less than 0.02 percent of the Ready Reserve population. The high amount of MOS students and enrollees currently occupy spaces on the UMR without contributing to positive DMOSQ rates. The population of Soldiers that are students and enrollees may used to count toward positive DMOSQ in the ITRS or DRRS-A if they have a secondary MOS. Since the numbers of individuals across the USAR that may be artificially contributing to positive DMOSQ in another unit is unknown the data analysis has an additional set of built in errors that affect this study.

<sup>&</sup>lt;sup>210</sup>Holdee Metric from ITRS ATRRS Data as of March 6, 2014; RLAS Data as of March 6, 2014.

 $<sup>^{211}\</sup>mbox{Headquarters},$  Department of the Army, Army Regulation 220-1, paragraph 9-2 h (6).

<sup>&</sup>lt;sup>212</sup>Howard, "The 85 Percent Solution," 11-12.

Another business rule that as an effect on USAR readiness analysis is that the primary system used by the Army to manage DMSOQ is not the primary system used in the USAR. The CUSR is not being fully utilized by the USARC to manage DMOSQ. <sup>213</sup> Differing USAR and AC readiness metrics and the applicability to non-rotational USAR units makes using the CUSR difficult to measure. The automated interface that transfers information from the RLAS to the ITRS makes the RLAS the best available tool for real-time unclassified metrics data. The CUSR regular report is only required to be submitted quarterly for units not on active duty while some ITRS reports are updated bi-weekly. <sup>214</sup> Therefore the timeliness of the CUSR data may not be as current as ITRS data. <sup>215</sup> Due to the time difference between the systems the value of comparing the data is useless in evaluating the main question in this thesis.

Another business rule that severely affected DMOSQ analysis is the constant accountability changes of personnel non-deployable for administrative reasons. Unit members that are non-deployable for administrative reasons include medical, <sup>216</sup> legal, <sup>217</sup> not meeting or maintaining standards, <sup>218</sup> and status changes. <sup>219</sup> Soldiers in the unit that

 $<sup>^{213} \</sup>rm U.S.$  Army Reserves ITRS Support Team, "Individual Training and Readiness System User Manual," 2-2.

<sup>&</sup>lt;sup>214</sup>Some USAR TPU are designated as Always Available and report monthly. Validation reports are more frequent and Change reports are as required but the DRRS-A data is still older than ITRS.

<sup>&</sup>lt;sup>215</sup>Headquarters, Department of the Army, Army Regulation 220-1, Table 4-1 CUSR Report submission frequency requirements.

<sup>&</sup>lt;sup>216</sup>Pregnancy or medical non-deployable.

<sup>&</sup>lt;sup>217</sup>Failing drug screening.

are pending legal separation under drug reduction, fitness, non-participation, or weight control are usually manually placed in the projected loss category (9993)<sup>220</sup> in RLAS.

Another business rule that has affected DMOSQ analysis is the changing accountability policies that add or remove Soldiers from the projected loss list. The projected loss list is a roster of Soldiers assigned to the unit that are not placed in a duty position. The projected loss roster allows units to open up positions for recruiting 180 days before the position becomes vacant. Previously, Soldiers with more than nine missed Battle Assemblies, or Non-Participants were not being removed from unit MTOE/TDA positions to the pending loss category on the UMR. In first quarter FY 14, the USAR initiated an automated function in TAPDB-R that automatically moved any Soldier that had more than nine missed Battle Assemblies into the pending loss category. When Soldiers with more than nine missed Battle Assemblies were automatically moved from unit positions, the unit DMOSQ percents fell dramatically. During the next CUSR reporting period, following the change, the same Non-Participant Soldiers were manually moved back into duty positions for the CUSR and reported as available for duty. The manual move was done pending approval of the Non-Participants' discharge packets and because NetUSR did not allow the report to validate with unassigned Soldiers. The NetUSR program was updated, at a later date, to include a check box that would allow Soldiers in positions to be marked as administratively unavailable. This addition helped

 $<sup>^{218}\</sup>mbox{Not}$  meeting Army Physical Fitness Testing (APFT) standards, or Height Weight Standards.

<sup>&</sup>lt;sup>219</sup>Unit transfers, retirement, end of service.

<sup>&</sup>lt;sup>220</sup>The maximum time a Soldier is allowed to be in the projected loss (9993) category is 180 days.

negate the administratively non-deployable members counting toward assigned strength. If the unit administrator or commander, in the process of submitting the CUSR, misses the administratively unavailable check box, the Soldier will be counted as a deployable asset and reduce the DMOSQ. Additionally, the time required to process personnel actions and legal separations for drug reduction, fitness, non-participation, or weight control often require more time than the Soldier is allowed to reside in the projected loss category (9993). For this reason unit administrators may be tempted to move Soldiers temporally back into UMR to reset the 9993 category clock. The effect of constantly changing policies for accounting for projected losses compounds the analysis of DMOSQ readiness.

A business rule that contributes to the uselessness of the DMOSQ readiness data is the policies used to account for Soldiers waiting to attend schools. Normally, Soldiers have 24 months to complete MOS qualification training once assigned to the unit. The Soldier is assigned to a position on the UMR to justify and authorize funding for the MOS reclassification. When a Soldier fails to complete the DMOSQ training within 24 months, he or she will often be reassigned into a position in the unit based on any MOS matches the Soldier may have or to a MOS-immaterial position. When the Soldier is pending attendance or on a wait list to attend an MOS producing school he or she will not be counted in the ITRS reports that highlight Soldiers who require MOS schooling. Unit managers can use this policy to hide non-DMOSQ Solders for 24 months at a time. If the Soldier fails to attend MOS training they can be re-submitted and hidden again. There currently is little penalty for failure to complete MOS reclassification training when it is

the fault of the Soldier. The policies used to account for Soldiers waiting to attend schools makes further makes the USAR DMOSQ readiness data corrupt.

Another set of business rules that causes the DMOSQ source data to be corrupted are the unclear policies for Soldiers with an outstanding military service obligation. When a Soldier with pending legal actions has an outstanding military service obligation, unit administrators also request a transfer to the IRR. IRR transfer paperwork is easier to get approved and still has the desired effect of removing the Soldier from the unit UMR. The issue for the USAR is that the status of the Soldiers with separations under drug reduction, fitness, or weight control will not change when the Soldier is transferred into the IRR. A Soldier in the IRR is considered deployable in any MOS they are qualified in. Therefore, the numbers of IRR Soldiers with legal or standard disqualifications is unknown. The unknown number of IRR Soldiers that do not contribute to DMOSQ readiness makes determining the IRRs contribution to USAR DMOSQ readiness hard to determine in this study.

Another factor that complicates the daily management of DMOSQ data and directly affects this study is the classification of the data among the systems. Information that is collected in the RLAS, the ITRS, and the CUSR systems contains Personally Identifiable Information and varying levels of classified unit data. The RLAS and ITRS programs operate on the Non-secure Internet Protocol (IP) Router Network while the CUSR operates on standalone Secure Internet Protocol (IP) Router Network computers. Army Readiness tables and metrics are classified information maintained by the Department of the Army, G-3. Individual Training Readiness System report information contains varying amounts of detailed Personally Identifiable Information. The ITRS can

provide by name lists of non-DMOSQ Soldiers associated to a Unit Identifier Code to all ITRS users. Recent updates to the ITRS system have attempted to limit report operator access to their assigned units and add features allowing access to historical data. CUSR historical data can only be accessed through hard Secret copies of unit CUSR turn-in reports. All of the classifications on the data make the ease of accessing the data for analysis problematic.

Another issue discovered while investigating the systems used to manage DMOSQ readiness is the over simplification of the data in the form of percentages. Currently, DMOSQ reports in ITRS and CUSR provide results in percents. Although this is an effective way to reduce the classification of the collective readiness data, it is not without hazards. There are some basic mathematical rules behind comparison of data based on percentage.

The first rule of analyzing data in the form of percentages is related to the consolidation of the data based on percentage. Percents cannot be simply added and subtracted. If a unit has strength of 100 and is increased by 50 percent, the Soldier count becomes 150. If the 150 strength is reduced 50 percent, the new strength is 75 Soldiers. This simply means that the DMOSQ percentage of individual units will need to be translated into an absolute value before they can be consolidated. If company A has 30 percent of a certain MOS and company B has 10 percent of the same MOS, it would seem that the company A with 30 percent has a higher number of the MOS Soldiers between the two units. The actual numbers become clearer when the total Soldier population is also known. From the above example, if the total number of Soldiers in company A was 50, 30 percent would yield 15 Soldiers of the MOS. If company B had

200 Soldiers, 10 percent would yield 20 Soldiers of the MOS. The DMOSQ data produced in the ITRS and the DRRS-A is without consideration between unit sizes. Therefore, the USAR DMOSQ data in the form of percentages is difficult to directly compare without knowing the absolute value.

The second rule of analyzing data in the form of percentages is also related to the absolute value of the data. In order to ensure the percent calculated is relevant and comparable, the total number the percent references must also be known. An Army unit with 20 Soldiers will lose more percent for each non-DMOSQ Soldier assigned (5 percent per position) than a unit with 100 Soldiers assigned would (1 percent per position). If the smaller unit and the larger unit were both required to maintain 85 percent DMOSQ, the larger unit would require more personnel to man to 100 percent than the smaller one would. In the above example of 20 and 100 Soldier units, this would represent three and 15 Soldiers to go from 85 to 100 percent fill respectively. The DMOSQ data produced in the ITRS and the DRRS-A is without consideration for the weight each Soldier contributes to DMOSQ readiness. Therefore, the value comparing two USAR units' DMOSQ is will lead to false conclusions.

The third rule with evaluating DMOSQ in the form of percentages is related to perspective. If there are 100 Soldiers authorized in a unit and only 80 Soldiers assigned, all of them being DMOSQ, would the unit have a DMOSQ rate of 100 percent (80 of 80) or 80 percent (80 of 100)? The answer depends on the perspective of the individual manipulating the data.

In recognition of the complexity of the DMOSQ definition, the Army, on May 20, 2013, proposed redefining Available DMOSQ in AR 220-1 to Assigned MOS match.

This would help units better assess how well they were matching Soldier Skills with authorization documents.<sup>221</sup> If the definition change goes into effect it may not change how DMOSQ is calculated in NetUSR/DRRS-A or ITRS, but it will reinforce the difference between USAR manning policies and AR 220-1. The DMOSQ data produced in the ITRS and the DRRS-A is without consideration to the perspective between assigned and on-hand Soldiers. Therefore, the equality of USAR DMOSQ is difficult to determine.

The complexity of analyzing the feasibility of maintaining parallel DMOSQ readiness policies is shown in the illustration of the processes within the systems used to manage USAR DMOSQ. There are currently many different ways to obtain or determine DMOSQ fill percents in the USAR units.

Figure-1 illustrates first of the four most common ways to determine DMOSQ fill. The first two ways to obtain a DMOSQ report are from the ITRS system. The USARC database of record for DMOSQ is the ITRS data-base. The DTMS is by Army regulation the data base to be used to monitor unit readiness. Results A and B (G1 metrics and USARC DRC) roll up DMOSQ metrics are the results of an automated process within ITRS. Current ITRS metrics show some commands as being over strength and also having low DMOSQ strength. When a unit is over strength in assigned, and still has a low DMOSQ strength, there is a large population of Soldiers that do not meet deployment criteria. The two reports, generated in ITRS, are primarily used together to

<sup>&</sup>lt;sup>221</sup>U.S. Army, "Improving the Duty Military Occupational Specialty Qualification (DMOSQ) metric within the Unit Status Report (USR)."

<sup>&</sup>lt;sup>222</sup>Headquarters, Department of the Army, Army Regulation 525-29, paragraph 1-11b.

act as a check and balance between G1 and the G3. The ITRS provides close to real-time information while DRRS-A does not. The inconsistencies in the ITRS data make analyzing the feasibility of maintaining all units in the USAR at 85 percent DMOSQ difficult.

The second way to obtain a DMOSQ report is for the unit to manually produce one. The unit may, after being alerted to mobilize, conduct an internal self-check on the DMOSQ fill rate. An internally generated DMOSQ percent is possibly the most accurate DMOSQ rate as it considers all situations that would make a Soldier non-deployable or unavailable. This is usually done in Excel format and is a very time and labor intensive exercise. Human error resulting from a manually produced DMOSQ rate makes using this problematic source of data difficult to analyze.

The final way, discussed in this thesis, is to obtain a DMOSQ percent from the CUSR report. As mentioned earlier, the input into NetUSR is not automated and may result in an inaccurate DMOSQ report as the information is manually transferred. Currently, the CUSR reports are consolidated in DRRS-A and are used by Army planners to determine which Army Reserve units will be sourced for deployment. It is important that the information is as up to date as possible. The primary historical cause of low P-Levels in CUSR reporting was due to low MOSQ strength. The NetUSR program accounts for Soldiers differently than does the TAPDB-R that feeds ITRS. TAPDB-R codes Soldiers assigned to the unit per availability (see table 2). NetUSR does not have these categories and uses different ways to account for non-available Soldiers and unassigned Soldiers. Within DRRS-A/CUSR reports, Soldiers are assigned to the unit using the Unit Identifier Code. DRRS-A/CUSR does not have a way to detach and show

all the USAR unassigned, excess, or double-slotted MOSQ Soldiers.<sup>223</sup> The different internal codes used to manage DMOSQ makes using this problematic source of data difficult to analyze.

In order to visualize the difference between maintaining DMOSQ at 85 percent and ARFORGEN in USAR units some assumptions about the data need to be made. The following short analysis makes a calculation only based on the authorized size of the Select Reserve, uses AC ARFORGEN readiness gates, CEF and DEF units are of equal size among the ARFORGEN years, AGR force is 100 percent filled, the IRR do not contribute Soldiers to the calculations, and the DMOSQ shortages are spread equally across the USAR. The calculations are simply to illustrate the extra DMOSQ Soldiers that would be required between maintaining 85 percent DMOSQ, ARFORGEN requirements, and the effect of authorizing 125 percent in the ranks Private through Specialist.

For example, an authorized over strength of 125 percent in TPU Soldiers<sup>224</sup> based on the 2010 USAR end strength, would theoretically increase USAR TPU strength by 46,625 (see table 3). Assuming the historical average of 60 percent of the total TPU population is DMOSQ, the additional TPU strength would yield about 139,875 total DMOSQ individuals. The resulting TPU strength added to IMA and AGR would result in 158,875 total DMOSQ Soldiers in the Ready Reserve. The resultant DMOSQ total would be 158,875 out of 208,000 or 77 percent by the authorization of 125 percent over strength. The calculation has been simplified by not considering that the 125 percent

<sup>&</sup>lt;sup>223</sup>Fisher and Howard, "Apples and Oranges," 16-18.

<sup>&</sup>lt;sup>224</sup>2010 TPU strength was approximately 186,500 of the total 205,000 authorized.

policy applies to the ranks Private through Specialist. This means the additional increase in DMOSQ Soldiers by authorizing double fills will be reduced by the number of Private through Specialist positions in the USAR versus all other ranks.

Table 2. Ready Reserve Strength at the end of 2010

Ready Reserve 269,699						
Selected Reserve 203	IRR					
Paid Drilling Soldiers						
TPU Strength 186,467	Active Guard Reserve (AGR) 16,103	IMA 3,081	64,048			

Source: Data from Figure III-15: Total Army Reserve Strength as of December 31, 2010. Kathryn R. Coker, *The Indispensable Force: The Post-Cold War Operational Army Reserve*, 1990–2010 (Fort Bragg, NC: Office of Army Reserve History, 2013), 346.

Table 3. Effects of Authorizing 125 percent over Strength for all ranks of TPU at Historical DMOSQ Readiness Rates

Total			60% of			
TPU	125%	Delta	125%			
186500	233125	46625	139875	TPU	205000	Total Auth
			16000	AGR		
			3000	IMA		
			158875	Total	77.50%	DMOSQ

Source: Created by author.

There are DEF and CEF rotational Reserve units in each ARFORGEN pool (see table 4). Each year CEF and DEF units utilize the ARFORGEN metrics to determine DMOSQ fill requirements for their pool. As the units rotate through ARFORGEN, they have increasing P-Levels and corresponding DMOSQ levels that must be achieved. There are five ARFORGEN force pools when the deployment-to-dwell ratio is 1:4. If the 120,000 Soldiers were distributed equally among the five force pools, there would be 24,000 authorized positions in each pool. If the units were meeting the ARFORGEN minimum P-Level requirements for DMOSQ for each force pool, there would be 15,600 Soldiers in Reset; 18,000 in T/R-1; 20,400 in T/R-2; and 20,400<sup>225</sup> in the Available pool. Meeting the ARFORGEN minimum requirements would only necessitate filling 94,800 out of 120,000 positions within the CEF and DEF units. Maintaining 85 percent DMOSQ across all of the units would require an additional 7,200 DMOSQ Soldiers to fill vacancies.

<sup>&</sup>lt;sup>225</sup>Assumes that 50 percent are 100 percent filled and deployed.

Table 4. Comparison of ARFORGEN and 85 percent DMOSQ Fill Policy for Reserve Rotational Units

120000	120000 Total CEF and DEF					
	Α		Total			
Reset	TR/1	T/R 2	T/R 3	Avail		
24000	24000	24000	24000	24000		
65	75	85	85	85	% DMOSQ	
15600	18000	20400	20400	20400	SUM	94800
		Delta	25200			
	USAR 8	5% all the	time			
24000	24000	24000	24000	24000		
85	85	85	85	85	% DMOSQ	
20400	20400	20400	20400	20400	SUM	102000
	·	·			Delta	18000
					Delta MAX	7200

*Source*: Created by author.

If all positions within the Selected Reserve<sup>226</sup> are considered and applied to the above example, the total required DMOSQ matches to meet ARFORGEN requirements for 208,000 Ready Reserves is 164,320 (see table 5). To meet the USARs 85 percent requirement, 176,800 DMOSQ matches would be needed. The amount of additional DMOSQ matches required for the Reserve to maintain 85 percent DMOSQ fill all the time is 12,480. Future reductions in Reserve force structure to 195,000 would reduce the difference to 11,700 (see table 6).

<sup>&</sup>lt;sup>226</sup>Select Reserve authorized in FY 2013 is 205,000.

Table 5. Comparison of ARFORGEN and 85 percent DMOSQ Fill Policy for all Personnel in Select Reserve

ARFORGEN Applied to All of USAR								
208000 Total Strength Authorized								
	Α	RFORGEN				Total		
Reset	TR/1	T/R 2	T/R3	Avail				
41600	41600	41600	41600	41600				
65	75	85	85	85	% DMOSQ			
27040	31200	35360	35360	35360	SUM	164320		
		Delta	43680					
	USAR 8	5% all the	time					
41600	41600	41600	41600	41600				
85	85	85	85	85	% DMOSQ			
35360	35360	35360	35360	35360	SUM	176800		
		Delta	31200					
		Delta MAX	12480					

Source: Created by author.

Table 6. Comparison of ARFORGEN and 85 percent DMOSQ
Fill Policy for all Personnel in Select
Reserve future force size

ARFORGEN Applied to Future USAR						
195000						
	Α		Total			
Reset	TR/1	T/R 2	T/R 3	Avail		
39000	39000	39000	39000	39000		
65	75	85	85	85	% DMOSQ	
25350	29250	33150	33150	33150	SUM	154050
		Delta	40950			
	USAR 85% all the time					
39000	39000	39000	39000	39000		
85	85	85	85	85	% DMOSQ	
33150	33150	33150	33150	33150	SUM	165750
					Delta	29250
					Delta MAX	11700

Source: Created by author.

After reviewing and analyzing the systems, policies, and procedures used in calculating DMOSQ in support of readiness in the USAR the next step is to propose solutions to the problems discovered during this research that prohibit further analysis of the USAR 85 percent policy.

## CHAPTER 5

## PROPOSED SOLUTION AND CONCLUSION

## **Proposed Solutions**

After reviewing and analyzing the systems, policies, and procedures used in calculating DMOSQ in support of readiness in the USAR problems were discovered that prohibit accurate and further analysis of the USAR 85 percent policy. The problems encountered in the investigation of DMOSQ management are primarily caused by conflicting USAR policies and multiple redundant systems. The following are a set of proposals to address policies and system changes to improve DMOSQ readiness reporting in the USAR.

The first policy that can be addressed is how the USAR accounts for Soldiers. The assigned strength of a USAR unit is the denominator in determining DMOSQ in the CUSR and the ITRS. To improve readiness in the USAR, non-DMOSQ Soldiers should be carried in a status that does not add them to the assigned strength. Non-DMOSQ Soldiers should be accounted for against the Selected Reserve but not against individual units. To authorize training for a Soldier requiring initial or reclassification MOS training, he can be associated to a unit based on Duty Military Occupational Specialty requirements and future needs.

The Second policy in the USAR that can be improved upon is THHS account.

The RLAS currently could account for non-DMOSQ Soldiers by placing them in the

TTHS account. Reserve Component Readiness Assessment Methodologies: Is There a

Better Way? in 2004 also recommended utilizing the then new TTHS account to improve

Reserve readiness. <sup>227</sup> The current size of the TTHS account needs to be increased over the initial 4,000 personnel size limit. Time limits for completion of DMOSQ training after entering the TTHS account should follow the same business rules currently in place. The non-DMOSQ Soldiers should remain in the TTHS account until awarded the MOS or until time limits to complete training are exceeded. <sup>228</sup> If the non-DMOSQ Soldier fails to ship or complete the training in time <sup>229</sup> and has a service obligation, he should be transferred to the IRR pool or if applicable immediately reassigned to another unit in an MOS he is qualified in. <sup>230</sup> Additionally, Soldiers in the TTHS account should have some minimal <sup>231</sup> Battle Assemblies attendance requirements to ensure they are meeting the minimum readiness requirements.

The third process that could be improved upon in the USAR is the policies related to management of cross-fills. In order to fill shortages of DMOSQ Soldiers in mobilizing units and improve unit cohesiveness there needs to be improvements to expedite and streamline IRR assignment and use as filler personnel. As noted in "*Credibility of the Army Reserve in the New World Disorder*" in 1993, it was recommended that the transfer of cross-levels within the USAR needs to be formalized and streamlined.<sup>232</sup> The Reserve

<sup>&</sup>lt;sup>227</sup>James, "Reserve Component Readiness Assessment Methodologies," 3.

<sup>&</sup>lt;sup>228</sup>Once qualified, the DMOSQ Soldier should be assigned to a postion in the unit.

<sup>&</sup>lt;sup>229</sup>Usually within 24 months of assignment.

<sup>&</sup>lt;sup>230</sup>USAR, NGB, or AC.

<sup>&</sup>lt;sup>231</sup>Possibly APFT and HT/WT for MOS reclass but zero requirements for new enlistments without Initial Entry Training.

<sup>&</sup>lt;sup>232</sup>Stenger, "Credibility of the Army Reserve in the New World Disorder," ii.

needs to eliminate the distance requirement for assignment of IRR Soldiers not in the geographical unit footprint. Personnel in the IRR pool need to be assignable anywhere in the USAR for mobilization purposes. Priority of use for IRR will be given to those individuals in the geographical area that have expressed interest to be associated with a local unit, echoing volunteerism and retention from the *The United States Army Reserve 2007 Posture Statement*. <sup>233</sup> They should be assigned to the IRR pool strength and not against the unit assigned strength for accountability. An additional module in DTMS could list similarly the IRR earmarked for assignment during mobilization. IRR Soldiers should be given the opportunity to reclassify to meet the MOS requirements of their associated unit. Additionally, IRRs should be required to conduct minimum training in a paid status with their associated unit to meet APFT, drug testing, and medical screening. Allowing the IRR Soldiers to train with their unit allows more time for integration prior to mobilization, following the recommendation in *Component Readiness Assessment Methodologies: Is There a Better Way*? <sup>234</sup>

The fourth policy that needs to be addressed is the individual Soldier dwell time. Individual dwell time needs to be based on parent unit, not on the individual. Soldiers need to be able to deploy more often than the current deployment-to-dwell ratio of 1:4 allows. This will help eliminate the snowball effect of cross-leveling individuals or utilizing individual volunteers to fill vacancies in units that are preparing to deploy. Realigning the dwell to the unit also allows for individual Soldiers to volunteer for duty beyond what they are currently limited to.

<sup>&</sup>lt;sup>233</sup>Stultz, *The United States Army Reserve 2007 Posture Statement*, 27.

<sup>&</sup>lt;sup>234</sup>James, "Reserve Component Readiness Assessment Methodologies," 3.

The fifth recommended policy change is to improve the management of unit vacancies. To improve visibility on recruiting needs to improve USAR unit DMOSQ, commanders should be required to utilize the MOS shortage report in CUSR. The prioritization and ranking of shortages of MOS in the report can provide justification for funding MOS training and provide a central location for information on DMSOQ shortages. The current DMOSQ school system works to get Soldiers to training, but as was noted in 1992 *Post-Mobilization Training of Army Reserve Component Combat Units*, units still have problems recruiting to their authorized strength and filling open positions with qualified personnel. <sup>235</sup> Unit commanders need to pay attention to unit MOS shortages and coordinate with retention and recruiting to help alleviate this continuing historical USAR problem. The ability to show the unassigned, excess, or double-slotted MOSQ Soldiers in a unit is helpful for assignment managers and unit administrators to identify Soldiers to fill DMOSQ shortages in other USAR units.

The final USAR policy recommendation is to finalize transformation to a total force by removing the historical inter-component personnel management rivalries. Historically anything related reducing inter-component barriers in the Army has been politically charged. To improve DMOSQ filling in the Total Force, Soldiers need the flexibility to move between the USAR, NGB, and AC during their Military Service Obligation or for volunteer service. Currently reassignment of cross-levels between NG and USAR units is not allowed. AGR Soldiers can be reassigned from non-deploying

 $<sup>^{235} \</sup>mbox{Lippiatt},$  Polich, and Sortor, Post-Mobilization Training of Army Reserve Comonent Combat Units, xvi.

USAR units to deploying USAR units.<sup>236</sup> The barriers between components need to be removed to give Soldiers the more assignment options to ease matching MOS to available assignments. This will allow excess Soldiers other options besides going into a TTHS status or the IRR. The flexibility this option brings to the total force will increase DMOSQ assigned and improve cohesiveness in all units. Additionally, the *Total Force: Improving Reserve Component Readiness* suggested improving units readiness by being more selective when culling the force and placing more qualified individuals into USAR units.<sup>237</sup> The Reserve needs to ensure that it is selective when accepting transfers from the AC into the Reserve to ensure maximum DMOSQ job placement. If not the readiness of the Reserve will not be improved by the influx of transfers from the AC as transpired after the 1971 to 1973 downsizing.

The first USAR system recommendation is to consolidate DMOSQ calculations. A most important factor in increasing DMOSQ for USAR units is to establish one way to calculate and obtain a DMOSQ report. The USAR can improve DMOSQ and its ability to provide synchronized data by adopting standard Total Force data-bases and eliminating ITRS that provides duplicate readiness information. This recommendation to eliminate duplicate data bases follows Gary B. James's 2004 recommendation for more streamlined and objective unit readiness reporting within the USAR. DTMS could be modified as necessary to provide similar DMOSQ reports provided by the ITRS. TTHS management

<sup>&</sup>lt;sup>236</sup>Headquarters, Department of the Army, *Department of the Army Personnel Policy Guidance for Overseas Contingency Operations*, 30.

<sup>&</sup>lt;sup>237</sup>Shea, "Total Force," 29.

<sup>&</sup>lt;sup>238</sup>James, "Reserve Component Readiness Assessment Methodologies," 3.

needs to be synchronized with recruiting systems and allow for unit-level feedback in RLAS. Elimination of multiple systems would eliminate repetitive manual information input and confusion as to which data base contains the authoritative data.

The second system recommendation is for the USAR to utilize the same set of systems the Department of the Army uses to manage personnel. The USAR can improve DMOSQ accuracy by utilizing the CUSR to manage the UMR. All USAR units in the Enabler Operating Force, Operational and Functional Commands, and Generating Forces should manage TPU and AGR Soldiers' assignments on their UMR in the CUSR. Personnel data transmission between RLAS, AGRIMIS, and NetUSR needs to be automated to reduce repetitive manual information input and errors. DMOSQ and P-Level metrics in the CUSR will be more accurate and timelier. Unit level accessibility to SIPR network will need to be assured. A process to allow the UMR output to be printed from the NetUSR or accessed via DTMS without Secret classification may need to be considered.

After recommending proposals to address USAR policies and system changes to improve DMOSQ readiness reporting in the USAR the final step is to provide some conclusions and suggestions for future research based on the findings of this thesis.

## Conclusion

The mandate to achieve and maintain 85 percent DMOSQ at all times is based on historical USAR business practices adapted during the transition to the Operational Reserve construct, a solution to the lack of Department of the Army P-Levels guidance for non-rotational USAR units, and slowness of USAR to adopt ARFORGEN. The evaluation of the feasibility of requiring units to continue to maintain 85 percent DMOSQ

along with ARFORGEN produced more questions than answers. The value of this thesis is the consolidation and highlighting of issues inherent in legacy systems, policies, and procedures that are having an impact on speed of the transition of the USAR to an operational force. The facts presented herein can easily form the basis for an argument that the transformation from a strategic to an operational USAR is not yet complete. The following is the conclusion of this study based on the literature, history, and problems indentified in calculating DMOSQ in the USAR.

The differences between the AC and USAR DMOSQ reporting should be eliminated by the transition of the Reserve from a strategic to an operational force. As was noted in *Reserve Component Readiness Evaluation*, in 1972 low readiness was attributed to the inability of the USAR to properly report readiness data. <sup>239</sup> The transition to an operational force should have eliminated differences between reporting requirements for AC and USAR units that existed in 1972. If the transition has not eliminated differences it may be time to re-evaluate if the transition is complete.

The stated goal of the USAR since 2002 is for units to achieve or exceed 85 percent DMOSQ. Currently USAR units report an average between 60 to 70 percent DMOSQ even though they are carrying Soldiers in over strength. <sup>240</sup> USAR policy currently recruits more Soldiers into high-density MOS skills than units require to compensate for high rates of lower enlisted turbulence and improve USAR DMOSQ matching and reporting. To accommodate and account for the additional Soldiers, positions in the unit are filled with multiple Soldiers. The negative effects of exceeding

<sup>&</sup>lt;sup>239</sup>Sullivan, "Reserve Component Readiness Evaluation," ii.

<sup>&</sup>lt;sup>240</sup>Howard, "The 85 Percent Solution," 11-12.

manning authorizations are felt throughout the formation for first line leaders and unit managers. Lower level Non-Commissioned Officers and Full Time Staff (FTS) are overtasked with the extra Soldiers they have to manage, train, and lead. The leader-to-troop ratio limit is simply exceeded. The Table of Organization and Equipment (TOE) authorization documents do not easily authorize commanders to supply excess Soldiers in the unit with equipment for training. This makes it very challenging to conduct weapons qualification and often makes individual Soldier accountability and ownership impossible. While most USAR units exceed their maximum manning authorizations in lower enlisted positions through recruiting and USAR policy, as mentioned above, units are still having difficulty meeting ARFORGEN milestones as it relates to DMOSQ. As the USAR transitioned from a strategic force pool to an operational force, Military Occupational Specialty Qualification (MOSQ) fill rates have not improved.<sup>241</sup>

Not all USAR units are using ARFORGEN to manage readiness and training.

Currently the 205,000-Soldier USAR is divided into an Enabler Force of 120,000

Soldiers, with operational and functional commands of 25,000 Soldiers, a Generating

Force of 48,000 Soldiers, an account for Trainee, Transient, Holdee, and Student

(TTHS), and Individual Moblization Augmentee (IMA) of 12,000 Soldiers. Currently

only the Enabler Force is part of the rotational ARFORGEN operating force. Operational
and Funtional Commands are non-rotational and always avialable for mobilization. By

<sup>&</sup>lt;sup>241</sup>Col. Gary C. Howard, "Individual Soldier Qualification and Retention in the Army Reserve: The 85 Percent Solution," *Army Magazine* (July 2002): 11-12.

design, 41 percent of the Soldiers in the USAR do not have ARFORGEN applied to them for training and readiness purposes simply due to the way ARFORGEN was designed.<sup>242</sup>

Army transformation and adoption of the ARFORGEN model was supposed to improve DMOSQ rates thereby also assuring that cohesive units would be available for deployment while minimizing the need to resort to cross-level Soldiers into deploying units. The AFROGEN cycle model was adopted by the USAR to provide units, Soldiers, employers, and families with a predictable five-year deployment, training, and readiness time line. Adoption of ARFORGEN was part of the USAR transformation into a robust operational expeditionary force in response to the September 11, 2011, terror attacks. USAR alignment to the Army's operational force in the mid-1990s solidified the USAR's role as a critical provider of combat support and combat service support capabilities to the Total Force. This transformation was started in response to the growing operational needs and the failure of force policies established by Congress in 1973 to provide integrated forces. <sup>243</sup> Since cross-leveling Soldiers into deploying units still takes place, ARFORGEN has not helped the USAR improve DMOSQ rates or assure that cohesive units are available for deployment.

Army Force Generation does fit rotational Enabler Operating Force well but requires an always available status for Operational and Functional Commands. USAR Generating, TTHS, and IMA Soldiers are also difficult if not impossible to accommodate

<sup>&</sup>lt;sup>242</sup>U.S. Army Command and General Staff College, F100, *Managing Army Change: Army Force Generation Reading F106RA* (Fort Leavenworth, KS: U.S. Army Command and General Staff College, June 2013), 11.

<sup>&</sup>lt;sup>243</sup>Department of Command, Leadership and Management, 2013-2014 How the Army Runs, 7-3.

in ARFORGEN. ARFORGEN provides minimum P-Levels gates with associated minimum DMOSQ levels. Having a requirement across the USAR for 85 percent DMOSQ at all the times for all units is difficult to access Soldiers in TTHS and IMA pools. Requiring 85 percent DMOSQ for the Enabler Operating Force and Operational and Functional Commands is feasible but not likely achievable. The 85 percent goal overrides the P-Level gates of ARFORGEN during Reset, T/R-1, and T/R-2. The 85 percent goal also increases demand for MOSQ Soldiers during Reset, T/R-1, and T/R-2. USAR unit DMOSQ fill percents can be increased by eliminating redundant systems information, automating reporting processes. Unlike *Post-Mobilization Training of Army* Reserve Component Combat Units, todays Reserve unit's low DMOSQ cannot be assumed away and needs to be consided in all phases of ARFORGEN.<sup>244</sup> Reduction in personnel requirements and standards is not a fix for low DMOSQ or the requirement to reassign cross-levels as suggested by James R. Norris in "The Mobilization of Individual Replacements by the Army Reserve." 245 The DMOSQ readiness for certain categories of Soldiers in the USAR, like THSS and IMA, is not manageable within ARFORGEN construct when because they are not associated with a unit MTOE/TDA.

Historical affiliation programs like STEDFAST had not actually helped with USAR unit readiness and shortfalls<sup>246</sup> and are no longer applicable to the operational

<sup>&</sup>lt;sup>244</sup>This was done to negate low DMOSQ effects on unit collective training for this chapter in the study. This shows the connection between low DMOSQ and its direct effect on unit training. Individual training is covered in later chapters of *Post-Mobilization Training of Army Reserve Component Combat Units*.

<sup>&</sup>lt;sup>245</sup>Norris, "The Mobilization of Individual Replacements by the Army Reserve," 7.

<sup>&</sup>lt;sup>246</sup>Doerr, "Reserve Component Readiness," 4.

Reserve. The concept of mutually beneficial and fiscally efficient AC and Reserve unit training is applicable as it provides the Reserve units the opportunity to provide real-world support during yearly annual training events as suggested by James W. Kellogg.<sup>247</sup> Coordinated training events are beneficial to USAR readiness.

When a USAR unit does not meet either the ARFORGEN P-Level metrics or USAR minimum DMOSQ standards, the unit will have a shortage of DMOSQ personnel for training and mobilization. The Army requires 100 percent DMOSQ position filling and authorizes up to 10 percent over fill during mobilization to account for losses during mobilization. The personnel that fill DMOSQ shortages in a deploying unit are transferred or cross-leveled from a donor unit by the authority of the USAR Commander. Cross-filling occurs because the demand for Soldiers is greater than the recruiting or retention can supply. For reporting purposes unit commanders are instructed to maintain cohesive units and refrain from cross-leveling for readiness reporting purposes. <sup>248</sup> Cross-leveling cannot be used to improve readiness reporting.

When Soldiers are cross-leveled from other units to fill MOSQ vacancies for mobilization, the Soldier's personal dwell time will become out of sync with his unit's ARFORGEN reset (dwell) cycle. When he or she returns to his unit, he or she may be non-available for deployment during his unit's available phase. This will cause his unit, if mobilizing during their Soldier's reset time, to need to request additional Soldiers to fill unit shortages. The phenomenon of cascading effects from cross-filling, or the snowball

<sup>&</sup>lt;sup>247</sup>Kellogg, "Leveraging the Reserve Component," 14.

<sup>&</sup>lt;sup>248</sup>Headquarters, Department of the Army, Army Regulation 220-1, *Army Unit Status Reporting and Force Registration-Consolidated Policies* (Washington, DC: Headquarters, Department of the Army, 2010), paragraph 9-2(a).

effect, occurs due to shortages of available DMOSQ Soldiers. Therefore, addressing personal dwell time policies will address USAR readiness.

Deploying cohesive units ensures that Soldiers are able to leverage as much of their collective training experiences as possible going into a deployment. USAR Soldiers may not be able to conduct as much unit collective training in a year as desired due to having less time during the year to train. The lack of time to conduct collective training is partially due to individual and unit mandatory training requirements that consume about 31 training days a year. Unit cohesiveness between Soldiers on a social and working basis does exist in Army Reserve units and is a key factor for mission success and morale. Establishing unit cohesiveness early helps to ensure that unit members have more shared collective training experiences that are valuable during deployment.

The DMOSQ fill is one of the factors in determination of the P-Level of a unit during readiness reporting in the Commander Unit Status Reporting (CUSR). A low DMOSQ rate will drive the P-Level lower and negatively affect the overall readiness rating for the unit. The unit's ability to conduct Mission Essential Task List training and the overall training level (T-level) assessment will be lowered by the low DMOSQ. The CUSR report is designed in a manner that recognizes the negative effects of low manpower in Army units. When a unit's manpower is low, <sup>249</sup> the unit has more difficulty in accomplishing its critical wartime missions. The DMOSQ rate for a unit will continue to be the main indicator of a units' ability to accomplish war-time missions.

In attempting to address low DMOSQ rates, the USAR has adopted policies different than the AC for recruitment and manning strength. Recruiting systems regularly

<sup>&</sup>lt;sup>249</sup>Which means the DMOSQ fill rate for the whole unit is not 100 percent.

keep high-density MOS skill level 1 positions in USAR units open to 125 percent fill and advertise positions as "will train." Advertising that the unit will train a newly assigned member causes a steady influx of Soldiers to be assigned to the unit that are not DMOSQ. The original intent was to help mitigate the high attrition rate of lower enlisted personnel in high-density MOS. The negative side effect of uncontrolled assignment of non-DMOSQ Soldiers is the fall in DMOSQ rate. Differing manning practices between the AC and USAR have also included assigning more than one Soldier to a duty position in USAR units and allowing assigned strength to exceed unit authorized strength. Double slotting and excess over strength reduce leadership span of control, require more resources to manage, and reduce training effectiveness.

The need for high-quality USAR Soldier MOS assignment management at the unit level is an important difference between AC and USAR. Active service Soldiers are MOS qualified for the skill they ultimately perform during their active service. The Soldiers will have attended Initial Entry Training and respective MOS qualifying course and do not negatively affect the AC unit's DMOSQ readiness metrics while training. USAR units, on the other hand, can recruit initial enlistees, receive AC transfers, or gain Reserve Officer Training Corps cadets, and will account for the Soldier before he or she attends his respective MOS qualifying course. <sup>251</sup> This condition increases the unit's

<sup>&</sup>lt;sup>250</sup>U.S. Army, "My UMR Is out of Control," S1NET Home Page, https://www.milsuite.mil/book/message/482549#482549 (accessed April 1, 2014). "Will train" means the unit will accept a Soldier who is non-DMOSQ now and will fund and train the Solider for the duty position at a later date. The unit accepts a lower readiness level until the soldier is trained.

<sup>&</sup>lt;sup>251</sup>Department of Command, Leadership and Management, 2013-2014 How the Army Runs: A Senior Leader Reference Handbook, 7-15.

Soldier assigned strength and also decreases the unit's DMOSQ metrics. The need for strong unit personnel management in USAR units will increase as the Total Force downsizes.

The USAR has multiple systems and procedures for accounting for Soldiers, which can contribute to lowering the DMOSQ rates. <sup>252</sup> The DMOSQ percent rate of a unit is the measure of positions filled against the total unit authorizations. Currently the ARFORGEN metrics of readiness and Commander Unit Status Reports count only those Soldiers that meet all of the critical DMOSQ training requirements for a Soldier to be deployable. DMOSQ is managed within the USAR in the Individual Training Readiness System (ITRS), which draws from multiple DoD Soldier record data-base systems. The legacy systems currently being utilized to manage USAR DMOSQ provide conflicting information to unit managers.

Assignment location is critical for a USAR Soldier. Soldiers assigned in the USAR often have more than one DMOSQ as they will reclassify their MOS to maintain their ability to stay in a unit close to their home. The ideal unit, position, and Soldier matches are the ones able to go directly into a position in the Unit Manning Roster (UMR) that matches one of the Soldiers current MOSs. Due to geographical locations of USAR units and differing MOS requirements between AC, USAR, and the National Guard (NG), a perfect match for Army Retention services will continue to be difficult to achieve.

The facts presented above easily form the basis of the argument that the transformation from a strategic to an operational USAR is not yet complete. The inability

<sup>&</sup>lt;sup>252</sup>Ibid.

of this study to answer the question of this thesis is based on the conflicting systems, policies, and procedures used to calculating DMOSQ in the USAR. There needs to be a re-evaluation to the legacy systems, policies, and procedures used in the USAR to manage personnel before DMOSQ readiness can be improved. This thesis has highlighted some of the hidden and unpopular changes that may need to be made to finalize the transition of the USAR into a truly operational force integrated into the Total Army. The object of this thesis is to improve the readiness of the Total Army. This thesis will be of interest to officials in the DoD that manage Reserve Components readiness.

Additional research that needs to be conducted related to this thesis includes: What aspects if any of the Strategic USAR has not transformed to the Operational USAR construct? Identify AC/USAR/NG barriers to the continuation of service not fully eliminated in Total Force. Which systems and process in of the USAR are not fully compatible with Army Total Force Policy in Army Directive 2012–08 and why? How could recruiting systems be changed or leveraged to help manage cross-filling?

#### **GLOSSARY**

- Active Guard Reserve (AGR). Refers to National Guard and Army Reserve Soldiers serving on active duty or full-time National Guard duty in the AGR program. Daily duties support readiness of the reserve component.
- Battle Assemblies. Used to describe monthly Army Reserve training where Soldiers practice their MOS during individual and collective training to maintain readiness.
- Combat Service Support. Combat service support forces provide sustainment to all operating forces on the battlefield through administrative and technical (logistical) services. This ensures that the combat and combat support forces are sufficiently manned, fed, fueled, maintained, and moved as required.
- Cross-filling. The process of moving cross-levels. See Cross-level.
- Cross-level. Cross-level refers to a Soldier who is voluntarily or involuntarily assigned from one unit, major subordinate command, or component to another in order to increase personnel readiness in an alerted or sourced unit. This action can be done between reserve and active components. Cross-leveling between the Army Reserve and National Guard is not authorized. Cross-leveling between the Army Reserve and major subordinate commands requires commanding general and USARC approval.
- Deployment-to-dwell ratio (D2D). Is the ARFORGEN ratio of time deployed to time at home station. Deployment equals time away and dwell equals time at home. Replaces Boots on the Ground terminology.
- Duty Military Occupational Specialty Qualification (DMOSQ). Is when a Soldier has the qualification for the MOS and duty position assigned to within a unit. Interchangeable with Duty Military Occupational Specialty Qualified. The term is currently in review to be changed to Duty Military Occupational Specialty Match to better reflect the relation to the job position.
- Full Time Staff (FTS). Is composed of AGR and Civilian Military Technicians.
- General Staff. Staff in a headquarters commanded by a general officer. Commonly referred to as G-Staff, the general staff is composed of coordinating staff group of Personnel (G1), Intelligence (G2), Operations (G3), Logistics (G4), Civil Military Operations (G5), Signal (G6), and Special Staff group.
- Individual Mobilization Augmentee (IMA). An individual reservist attending drills who receives training and is pre-assigned to an active component organization, a Selective Service System, or a Federal Emergency Management Agency billet. Individual Mobilization Augmentees train on a part-time basis with their

- organization of assignment. Inactive duty training for individual mobilization augmentees is decided by component policy and can vary from zero to 48 drills a year.
- Individual Ready Reserve (IRR). Is a Ready Reserve of Soldiers not assigned to the Selected Reserve. IRR Soldiers are subject to involuntary mobilization due to a contractual or volunteer military service obligation. IRR Soldiers are a possible source of fillers for mobilizing units. Current Department of Defense (DoD) policies require a declaration of national emergency or presidential call up before IRR Soldiers can be mobilized. This limits the immediate and operational use of IRR Soldiers unless the declaration or call up is concurrent or precedes USAR unit activations. IRR Soldiers currently have no obligation to conduct military training or qualification while assigned to the IRR pool. When IRR Soldiers are mobilized they will require time to be evaluated in their ability to deploy.
- Initial Active Duty for Training. Is the pay status in which a newly assessed USAR Soldier is assigned part time to complete Initial Entry Training.
- Initial Entry Training. Is a two-phase initial Soldier training comprised of Basic Combat Training (BCT) and Advanced Individual Training (AIT).
- Military Occupational Specialty (MOS). Is a code used to identify job positions in the United States Army. The required number and grade of personnel in a unit is determined by Department of the Army published TOE and TDA documents. Individual Soldiers may have to be qualified in more than one MOS. The Duty Military Occupational Specialty the Soldier is currently assigned to is normally the primary MOS and additional are secondary or alternate MOSs. The primary MOS is also used by the Human Resource Command for professional development and promotion purposes.
- Military Occupational Specialty Qualification (MOSQ). Is an individual Soldier that has completed the requirements to be counted as being awarded an MOS.
- Ready Reserve. The Ready Reserve is comprised of military members of the Reserve and National Guard, organized in units or as individuals. Ready Reserve members are subject to recall to active duty to augment the active component in time of war or national emergency. The Ready Reserve consists of the Selected Reserve, IRR, and Inactive National Guard.
- Select Reserve. The Selected Reserve of the Army consists of units and individuals in the Ready Reserve designated essential to initial wartime missions. The Selected Reserve includes officers, warrant officers, and enlisted Soldiers assigned to the National Guard, assigned to TPU in the Army Reserve, serving on active duty title 10 or full-time title 32 status, and IMA.

Strategic Force. A force available for use as secondary reinforcing force. The slowness of mobilization and training means the strategic force is deployed later in an operation to suppliment the operational force.

Troop Program Unit (TPU). Is a Ready Reserve unit manned primarily with drilling reservists. TPU is also used commonly to refer to drilling reserve Soldiers.

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